

# SEQUENCE LISTING

<110> Aros Applied Biotechnology ApS  
 <120> Classification of Cancer  
 <130> 69167(302423)  
 <140> US 10/584,653  
 <141> 2006-06-27  
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| ttacaaaaac | cttccccagg  | ctggacgtgg | tggtcacgc   | ctgtaatccc  | agcacttttg | 540  |
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| caaaaaaaaa | aaaaaaaaaa  | aaaatacaaa | aattagccgg  | gcgtggtggc  | ccacgcctgt | 840  |
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| gcagtgcagt | gagattgtgc  | cacttcactc | cagcctgggt  | gacaaagtga  | gactccgtca | 960  |
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<212> DNA

<213> NM\_004184.3| Homo sapiens tryptophanyl-tRNA synthetase (WARS), transcript variant 1, mRNA

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<213> NM\_006263.2| Homo sapiens proteasome (prosome, macropain) activator subunit 1 (PA28 alpha) (PSME1), transcript variant 1, mRNA

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<211> 983

<212> DNA

<213> NM\_004335.2| Homo sapiens bone marrow stromal cell antigen 2 (BST2), mRNA

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| cagaagggct ttcaggatgt ggaggcccag gccgccacct gcaaccacac tgttatggcc  | 300 |
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<212> DNA

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| taaaaaaaaa aaaaaaaagg aatagaaaca gtttcaacca gattgtccta tccccctgt   | 3180 |
| tccattcccc tcttcttctt tctatctcct tccccggcaa aaaccaaaaa aactggcaga  | 3240 |
| caggccaggg atgtatgttg cttgcttgag aggggttctt ttacttcaaa atctttcttc  | 3300 |
| agggagcaag acatgaactg actaattggg atccactact tgtacagctt acataaatga  | 3360 |
| gttgatgata ttttaaccagt ttttataaac ttcatttagg tctctaaaca cagacttttt | 3420 |
| aaattgcaac tgtaaatatg aaatgggtcat cacatctgac cttggtcagt ggggagggga | 3480 |
| actggtatcc tgccaagcct ggttgtaatt tgtaaccatt tctattttgt gcaaaactctg | 3540 |
| taaatatgtg ttttaacaaa tgtaaatatt tgtaacaagt acactggaga acaaggga    | 3600 |
| ctcaagattc ttccagccac atgtcacctg taggtagaag taaactctgc agtgcagctt  | 3660 |
| ctgctcttgg cccctctggc cagggccctt gtggttctt gcacactgga cagggtgactg  | 3720 |
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<210> 7

<211> 829

<212> DNA

<213> NM\_002818.2| Homo sapiens proteasome (prosome, macropain) activator subunit 2 (PA28 beta) (PSME2), mRNA

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| tcttcagaca gaatcttttc caggaggctg aggaattcct ctacagattc ttgccacaga   | 180 |
| aatcatata cctgaatcag ctcttgcaag aggaactcct caatgtggct gacttgactt    | 240 |
| ccctccgggc cccactggac atcccatcc cagacctcc acccaaggat gatgagatgg     | 300 |
| aaacagataa gcaggagaag aaagaagtcc ataagtgtgg atttctccct gggaatgaga   | 360 |
| aagtcctgtc cctgcttgcc ctgggttaagc cagaagctctg gactctcaaa gagaaatgca | 420 |

|   |     |
|---|-----|
| ttctgggtgat tacatggatc caacacctga tccccaagat tgaagatgga aatgattttg  | 480 |
| gggttagcaat ccaggagaag gtgctggaga gggatgaatgc cgtcaagacc aaagtggaag | 540 |
| ctttccagac aaccatttcc aagtacttct cagaactgtg ggatgctgtg gccaaaggcct  | 600 |
| ccaaggagac tcatgtaatg gattaccggg ccttgggtga tgagcgagat gaggcagcct   | 660 |
| atggggagct caggggccatg gtgctggacc tgagggcctt ctatgtctgag ctttatcata | 720 |
| tcatcagcag caacctggag aaaattgtca acccaaaggg tgaagaaaag ccatctatgt   | 780 |
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<210> 8

<211> 2974

<212> DNA

<213> NM\_004363.1 Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 5 (CEACAM5), mRNA

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|--|-----|
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| tctccctcgg cccctcccca cagatgggtc atccctggc agaggctcct gctcacagcc   | 180 |
| tcacttctaa ccttctgtaa cccgcccacc actgccaaagc tcactattga atccacgccg | 240 |
| ttcaatgtcg cagaggggaa ggaggtgctt ctacttgtcc acaatctgcc ccagcatctt  | 300 |
| tttggtctaca gctgggtaca aggtgaaaga gtggtggcca accgtcaaat tataggatat | 360 |
| gtaataggaa ctcaacaagc taccacaggg ccgcataca gtggctcgaga gataatatac  | 420 |
| cccaatgcat cctgtctgat ccagaacatc atccagaatg acacaggatt ctacacccta  | 480 |
| cacgtcataa agtcagatct tgtgaatgaa gaagcaactg gccagtccg ggtatacccg   | 540 |
| gagctgcaca agccctccat ctccagcaac aactccaaac ccgtggagga caaggatgct  | 600 |
| gtggccttca cctgtgaacc tgagactcag gacgcaacct acctgtggtg ggtaaacaat  | 660 |
| cagagcctcc cggtcagtc caggctgcag ctgtccaatg gcaacaggac cctcactcta   | 720 |
| ttcaatgtca caagaaatga cacagcaagc tacaaatgtg aaaccagaa cccagttagt   | 780 |
| gccaggcgca gtgattcagt catcctgaat gtctctatg gcccggtatg cccaccatt    | 840 |
| tccctctaa acacatctta cagatcaggg gaaaatctga acctctcctg ccacgcagcc   | 900 |

|             |            |             |            |            |             |      |
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| gagctcttta  | cccccaacat | cactgtgaat  | aatagtggat | cctatacgtg | ccaagcccat  | 1020 |
| aactcagaca  | ctggcctcaa | taggaccaca  | gtcacgacga | tcacagtcta | tgcagagcca  | 1080 |
| cccaaacctt  | tcatcaccag | caacaactcc  | aaccccgtag | aggatgagga | tgcgttagcc  | 1140 |
| ttaacctgtg  | aaactgagat | tcagaacaca  | acctacctgt | ggtagggtaa | taatcagagc  | 1200 |
| ctcccggtca  | gtcccaggct | gcagctgtcc  | aatgacaaca | ggacctctac | tctactcagt  | 1260 |
| gtcacaagga  | atgatgtagg | acctatgag   | tgtggaatcc | agaacgaatt | aagtgttgac  | 1320 |
| cacagcgacc  | cagtcactct | gaatgtctcc  | tatggcccag | acgacccac  | catttcccc   | 1380 |
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| tttatctcca  | acatcactga | gaagaacagc  | ggactctata | cctgccaggc | caataactca  | 1560 |
| gccagtggcc  | acagcaggac | tacagtcaag  | acaatcacag | tctctcgagg | gctgcccgaag | 1620 |
| ccctccatct  | ccagcaacaa | ctccaaacct  | gtggaggaca | aggatgctgt | ggccttcacc  | 1680 |
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| gtcagtcaca  | ggctgcagct | gtccaatggc  | aacaggaccc | tcactctatt | caatgtcaca  | 1800 |
| agaaatgacg  | caagagccta | tgtatgtgga  | atccagaact | cagtgtagtc | aaaccgcagt  | 1860 |
| gaccocagtc  | ccctggatgt | cctctatggg  | ccggacaccc | ccatcatttc | ccccccagac  | 1920 |
| tcgtcttacc  | tttcgggagc | gaacctcaac  | ctctcctgcc | actcggcctc | taaccctacc  | 1980 |
| ccgcagtatt  | cttgcgctat | caatggggata | ccgcagcaac | acacacaagt | tctctttatc  | 2040 |
| gccaaaatca  | cgccaaaata | taacggggac  | tatgcctgtt | ttgtctctaa | cttggtact   | 2100 |
| ggcgcgaata  | attccatagt | caagagcctc  | acagtccttg | catctggaac | ttctcctggt  | 2160 |
| ctctcagctg  | gggccactgt | cggcctcatg  | attggagctg | tggttggtgt | tgctctgata  | 2220 |
| tagcagccct  | ggtgtagttt | cttcatttca  | ggaagactga | cagttgtttt | gcttcttctc  | 2280 |
| taaagcattt  | gcaacagcta | cagtcataaa  | ttgcttcttt | accaaggata | tttacagaaa  | 2340 |
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| aaatacaaaa  | atgagctggg | cttggtggcg  | cgcacctgta | gtcccagtta | ctcggggagg  | 2460 |
| tgaggcgagga | gaatcgcttg | aacccggggg  | gtggagattg | cagttagccc | agatcgaccc  | 2520 |
| actgcactcc  | agtcgtggca | cagagcaaga  | ctccatctca | aaaagaaaaa | aaaagaagac  | 2580 |

|            |             |            |            |            |            |      |
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| tctgacctgt | actcttgaat  | acaagtttct | gataccactg | cactgtctga | gaatttccaa | 2640 |
| aactttaatg | aactaactga  | cagcttcacg | aaactgtcca | ccaagatcaa | gcagagaaaa | 2700 |
| taattaattt | catgggacta  | aatgaactaa | tgaggattgc | tgattcttta | aatgtcttgt | 2760 |
| ttcccagatt | tcaggaaaact | ttttttcttt | taagctatcc | actcttacag | caatttgata | 2820 |
| aaatatactt | ttgtgaacaa  | aaattgagac | atttacattt | tctccctatg | tggtcgctcc | 2880 |
| agacttgga  | aactattcat  | gaatatttat | attgtatggt | aatatagtta | ttgcacaagt | 2940 |
| tcaataaaaa | tctgctcttt  | gtataacaga | aaaa       |            |            | 2974 |

<210> 9

<211> 5028

<212> DNA

<213> NM\_005766.2| Homo sapiens FERM, RhoGEF (ARHGEF) and pleckstrin domain protein 1 (chondrocyte-derived) (FARP1), transcript variant 1, mRNA

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| aggcgcccat | ggcgaccctg  | agcccgctcc |
| ccgccccgcg | ccacctttga  | tggtctggac |
| cgccccgcgc | gocgcgcgcc  | gcggttatta |
| gggggcttgg | gagccgcgca  | tccggagacc |
| cgcgctgtg  | gagatattct  | ctaagccgct |
| accccaggat | cacgactggg  | ggccccggaa |
| cagaagccgc | ccccaacacc  | ttcaggaaaa |
| gacccccagg | aggcattttg  | agttccacaa |
| gtttgcaacc | acctcaacct  | cgtggaaggt |
| aaaaagatca | cggtgtggct  | ggatctccta |
| aagcacgttg | ttgttaagtt  | tgtggtgaaa |
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| ttgacgtga  | atgacaccag  | cgcagctctc |
| ggggattttg | atgaagcctt  | ggacagagag |
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|            |             | 540        |
|            |             | 600        |
|            |             | 660        |
|            |             | 720        |
|            |             | 780        |
|            |             | 840        |
|            |             | 900        |

|  |      |
|--|------|
| caagacgcac tagaggacaa aatcgtggaa ttccaccata accacattgg acaaacacca  | 960  |
| gcagaatcag atttccagct cctagagatt gcccgctggc tagagatgta tggaaatccgg | 1020 |
| ttgcaccgag ccaaggacag ggaaggcagc aagatcaatc tggccgttgc caacacggga  | 1080 |
| attctagtgt ttccaggttt cactaagatc aatgccttca actgggccaa ggtgcggaag  | 1140 |
| ctgagcttca agaggaagcg ctttctcctc aagctccggc cagatgccaa tagtgcgtac  | 1200 |
| caggatacct tggaaattct gatggcagc cgggatttct gcaagtcctt ctggaaaatc   | 1260 |
| tgtgttgaac atcatgcctt ctttagaactt ttggaagagc ccaaaccaaa gcccaagccc | 1320 |
| gtcctcttta gccgggggct atcatttcgg ttcagtggct ggactcagaa gcaggttctc  | 1380 |
| gactatgtta aagaaggagg acataagaag gtgcagtttg aaaggaagc cagcaagatt   | 1440 |
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| gcctctccct tgatcagccc gctgctgaat gaccaggcct gcccccggac ggacgatgag  | 1920 |
| gatgagggcc ggaggaagag attcccaact gataaagcgt acttcatagc taaggaagtg  | 1980 |
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| gaggccctgg agaattggaat caagagctcc cggcggctgg agaactcttg cagagacttt | 2340 |
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| ctcatgcact acaagcaggt cctggagcgg ctgtgcacaa accaccgcc gagccacgcc   | 2460 |
| gaactcaggg actgccgagc cgttttggca gagatcacgg agatggtggc acagctccac  | 2520 |
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|  |      |
|--|------|
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| ctttcaacc gtagcagggt tgttttctgt taagcaaaag cgagatccag tgcaatacct   | 4200 |
| ggactgtcac cgtcctgtga gtggtgtaca caatgggaag ataataagcc gtggtgtttt  | 4260 |
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| cgcattctct agtagtatat atcgtgcctg ttttcaaaaa catttccctt ttatactoa   | 4500 |
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<210> 10

<211> 7787

<212> DNA

<213> NM\_012334.1| Homo sapiens myosin X (MYO10), mRNA

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| agtcggagcg gcactcggcg agtcggggac tgcgtggaa caatggataa cttcttcacc   | 240 |
| gagggaacac gggctctggct gagagaaaat ggccagcatt ttccaagtac tgtaaattcc | 300 |
| tgtgcagaag gcatcgtcgt cttccggaca gactatgggc aggtattcac ttacaagcag  | 360 |
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| gacatggcgt cottgacaga gctccatggc ggctccatca tgtataactt attccagcgg  | 480 |
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|   |      |
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| aaggagaaga catcctgtgt tgaacgagct attccttgaaa gcagcccat catggaagct   | 840  |
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| aaaaaccgag tagtaaggca aaatccggg gaaaggaatt atcacatatt ttatgcactg    | 1020 |
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| acgcctctca atgttcaaca ggcagtagac agcagggact ccttgcccat ggctctgtat   | 1440 |
| gcgtgctgct ttgagtgggt aatcaagaag atcaacagca ggatcaaagg caatgaggac   | 1500 |
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| atagacaatg gagaatgcct ggacttgatt gagaagaaac ttggcctcct agcccttacc   | 1740 |
| aatgaagaaa gccattttcc tcaagccaca gacagcacct tattggagaa gctacacagt   | 1800 |
| cagcatgcca ataaccactt ttatgtgaag ccagagttg cagttaacaa ttttgagtg     | 1860 |
| aagcaactatg ctggagaggt gcaatatgat gtccgaggtt tcttgagaa gaacagagat   | 1920 |
| acatttcgag atgacctctc caatttgcta agagaaagcc gatttgactt tatctacgat   | 1980 |
| ctttttgaac atgtttcaag ccgcaacaac caggatacct tgaatgtgg aagcaaacat    | 2040 |
| cggcggccta cagtcagctc acagttcaag gactcactgc attccttaat ggcaacgcta   | 2100 |
| agtcctctca atcctttctt tgttcgctgt atcaagccaa acatgcagaa gatgccagac   | 2160 |
| cagtttgacc aggcggttgt gctgaaccag ctgcggtact caggagtgct ggagactgtg   | 2220 |
| agaatccga aagctgggta tgcggtccga agacccttcc aggaacttta caaaaggtat    | 2280 |
| aaagtgtga tgaggaatct ggctctgctt gaggacgtcc gagggaagtg cagcagcctg    | 2340 |



|  |      |
|--|------|
| ctgcagctct atgatgcctc caacagcgag tggcagctgg ggaagaccaa ggtctttctt  | 2400 |
| cgagaatcct tggaacagaa actggagaag cggagggaag aggaagttag ccacgcggcc  | 2460 |
| atggtgatc gggcccatgt cttgggcttc ttagcacgaa acaatacag aaaggtcctt    | 2520 |
| tattgtgtgg tgataataca gaagaattac agagcattcc ttctgaggag gagatttttg  | 2580 |
| cacctgaaaa aggcagccat agttttccag aagcaactca gaggtcagat tgctcggaga  | 2640 |
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| gtggaagaga tctctcgtct ggagaaagaa atcgaggacc tgcagcgcat gaaggagcag  | 2940 |
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| ctccgcaggc tggaggagga agcgtgcagg gcggcccagg agttcctcga gtccctcaat  | 3060 |
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| tcccccaacc ccagcgagca cggccactca gaccagcgaa caagtggcat ccggaccagc  | 3300 |
| gatgaactct cagaggagga ccatacatg aacgacacgg tgggtccac cagccccagt    | 3360 |
| gcggacagca cgggtgctgt cgcgccatca gtgcaggact ccgggagcct acacaactcc  | 3420 |
| tccagcggcg agtccacctc ctgcctgccc cagaacgctg gggacttgcc ctcccagac   | 3480 |
| ggcgactacg actacgacca ggatgactat gaggacgggt ccatcacttc cggcagcagc  | 3540 |
| gtgaccttct ccaactccta cggcagccag tgggtccccc actaccgctg ctctgtgggg  | 3600 |
| acctacaaca gctcgggtgc ctaccggttc agctctgagg gggcgcagtc ctcgtttgaa  | 3660 |
| gatagtgaag aggactttga ttccagggtt gatacagatg atgagcttcc ataccggcgt  | 3720 |
| gactctgtgt acagctgtgt cactctgccc tattttccaca gctttctgta catgaaaggt | 3780 |
| ggcctgatga actcttggaa acgcccgttg tgctctctca aggatgaacc cttcttgttg  | 3840 |
| ttccgctcca agcaggaggc cctcaagcaa ggctggctcc acaaaaaagg ggggggctcc  | 3900 |
| tccacgctgt ccaggagaaa ttggaagaag cgctgggttg tctccgccca gtccaagctg  | 3960 |
| atgtactttg aaaacgacag cgaggagaag ctcaagggca ccgtagaagt gcgaacggca  | 4020 |
| aaagagatca tagataaac caccaaggag aatgggatcg acatcattat ggccgatagg   | 4080 |

|             |             |            |            |             |            |      |
|-------------|-------------|------------|------------|-------------|------------|------|
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| cagaatgctg  | tgggcacctt  | ggatgtgggg | ctgattgatt | ctgtgtgtgc  | ctctgacagc | 4260 |
| cctgatagac  | ccaactcggt  | tgtgatcatc | acggccaacc | gggtgctgca  | ctgcaacgcc | 4320 |
| gacacgcg    | aggagatgca  | ccactggata | accctgctgc | agaggctcaa  | aggggacacc | 4380 |
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| ccgaagatgt  | cttcactgaa  | actgaagaaa | cggtggtttg | tactaccca   | caattccctg | 4500 |
| gattactaca  | agagttcaga  | gaagaacg   | ctcaaactgg | ggaccctgg   | cctcaacagc | 4560 |
| ctctgctctg  | tcgtccccc   | agatgagaag | atattcaaag | agacaggcta  | ctggaacgtc | 4620 |
| accgtgtacg  | ggcgcaagca  | ctgttaccgg | ctctacacca | agctgctcaa  | cgaggccacc | 4680 |
| cggtggtcca  | gtgccattca  | aaacgtgact | gacaccaagg | ccccgatcga  | cacccccacc | 4740 |
| cagcagctga  | ttcaagatat  | caaggagaa  | tgccatgaac | cggatgtggt  | ggaacagatt | 4800 |
| tacaacgga   | accgcatact  | tcgatacacc | catcacccct | tgcaactccc  | gtcctgtccc | 4860 |
| cttcggtatg  | gggacataaa  | tctcaacttg | ctcaaagaca | aaggctatac  | cacccttcag | 4920 |
| gatgagccca  | tcaagatat   | caattccctg | cagcaactgg | agtcacatgc  | tgaccaatt  | 4980 |
| ccaataatcc  | agggcatcct  | acagacagg  | catgacctgc | gacctctcgg  | ggacgagctg | 5040 |
| tactgccagc  | ttatcaaaca  | gaccaacaaa | tgccccacc  | ccggcagctg  | gggcaacctg | 5100 |
| tacagctggc  | agatcctgac  | atgcctgagc | tgcaaccttc | tgccgagtcg  | agggattctc | 5160 |
| aagtattctca | agttccatct  | gaaaaggata | cggaacagct | ttccaggaa   | cgagatggaa | 5220 |
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| aagtttgaaa  | agctggctgc  | cacatccgag | gttggggacc | tgccatggaa  | attctacttc | 5580 |
| aaactttact  | gcttcttgga  | cacagacaa  | gtgccaaaag | acagtgtgga  | gtttgcattt | 5640 |
| atgtttgaac  | aggcccacga  | agcggttata | catggccacc | atccagcccc  | ggaagaaaac | 5700 |
| ctccaggttc  | ttgtgcctc   | gcgactccag | tatctgcagg | gggattatata | tctgcacgct | 5760 |

|            |             |            |            |             |             |      |
|------------|-------------|------------|------------|-------------|-------------|------|
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| tcaacaaaa  | ccttcacccc  | ttgtgaacgg | ctggagaaga | ggcggacgag  | cttcctagag  | 5880 |
| gggacctga  | ggcggagctt  | cggacagga  | tccgtggtcc | ggcagaaggt  | cgaggaggag  | 5940 |
| cagatgctgg | acatgtggat  | taaggaagaa | gtctctctcg | ctcgagccag  | tatcattgac  | 6000 |
| aagtggagga | aatttcaggg  | aatgaaccag | gaacaggcca | tggccaagta  | catggccttg  | 6060 |
| atcaaggagt | ggcctggcta  | tggctcgacg | ctgtttgatg | tggagtcaa   | ggaaggtggc  | 6120 |
| ttccctcagg | aactctggtt  | gggtgtcagc | gcggaecgcg | tctccgtcta  | caagcgtgga  | 6180 |
| gagggaagac | cactggaagt  | cttcacgtat | gaacacatcc | tctcttttgg  | ggcacccctg  | 6240 |
| gcgaatacgt | ataagatcgt  | ggtcgatgag | agggagctgc | tctttgaaac  | cagtgaagtg  | 6300 |
| gtggatgtgg | ccaagctcat  | gaaagcctac | atcagcatga | tctgtaagaa  | gcgctacagc  | 6360 |
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| ccgaggatcc | ttttgcctgc  | cgccttcatt | gatecgtgat | taagctgtca  | actttaacag  | 6600 |
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| cgaccgtaac | tgtgctactg  | aagggaactg | cctttccccc | ttctggggga  | gaettaacag  | 6780 |
| agcgtggaag | gggggcattc  | tctgtcaatg | atgcactaac | ctcccaacct  | gatttccccg  | 6840 |
| aatctgaggg | aaggtgaggg  | agtgggaagg | gggatggaga | gctcgagggg  | acagtgtgtt  | 6900 |
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| ttaatcatgg | tttcatgagc  | attaaaaagc | aaagggaaaa | aggatgtgta  | atggtgtaca  | 7080 |
| cagtctgtat | attttaataa  | tgcagagcta | tagtctcaat | tgttacttta  | taagtggtt   | 7140 |
| ttattaacaa | acccaaatcc  | tggattttcc | tgtctttgct | gtattttgaa  | aaacacgtgt  | 7200 |
| tgactccatt | gttttacatg  | tagcaaatgc | tgccatctgt | gtctgtgta   | ttataaacag  | 7260 |
| ataagcagcc | tacaagataa  | ctgtatttat | aaaccactct | tcaacagctg  | gtccagtgcc  | 7320 |
| tggttttaga | acaagaatga  | agtcattttg | gagtccttca | tgtctaaaag  | atttaagtta  | 7380 |
| aaaacaaagt | gttacttgga  | aggttagctt | ctatcattct | ggatagatta  | cagatataat  | 7440 |
| aacctgttg  | actatggggg  | agagacgctg | cattccagaa | acgtcttaac  | acttgagtga  | 7500 |

|  |      |
|--|------|
| atcttcaaag gaccttgaca ttaaatgtg aggccttaat acacacatat ttatcccaa    | 7560 |
| gtttataatg gtggtctgaa caaggcacct gtaaataaat cagcatttat gaccagaaga  | 7620 |
| aaaataatct ggtcttggaac tttttatatt tatatggaaa agttttaagg acttgggcca | 7680 |
| actaagtcta cccacacgaa aaaagaaatt tgccttgacc ctttgtgtac aacctgcaa   | 7740 |
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<210> 11

<211> 2033

<212> DNA

<213> NM\_001533.1| Homo sapiens heterogeneous nuclear ribonucleoprotein L (HNRPL), mRNA

|  |      |
|--|------|
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| cggcggtggc cgctactacg gcggcggcag tgaggcgggc cgggccctca agcggtcaa   | 120  |
| gactgacaac gccggcgacc agcacggagg cggcgggcgt ggcgggtggg gagccggggc  | 180  |
| ggcgggcggc ggcggcggtg gggagaaact cgatgaccg cacaacaccc ctgcctccc    | 240  |
| agttgtccac atcaggggcc tgattgacgg tgtggtggaa gcagacctg tgaggcctt    | 300  |
| gcaggagttt ggaccatca gctatgtgtt ggtaatgcct aaaaagagac aagcactggt   | 360  |
| ggagtttgaa gatgtgttg ggccttgcaa cgcagtgaac tacgcagccg acaaccaa     | 420  |
| atcacattgt ggtcacccag cttttgtcaa ctactctacc agccagaaga tctcccgccc  | 480  |
| tggggactcg gatgaactcc ggagcgtgaa cagtgtgctt ctctttacca tctgaaccc   | 540  |
| catttattcg atcacaccg atgttcttta cactatctgt aatccttgtg gcctgtcca    | 600  |
| gagaattgtc attttcagga agaattggagt tcaggcgatg gtggaatttg actcagttca | 660  |
| aagtgccccg cgggcccaagg cctctctcaa tggggctgat atctattctg gctgttgac  | 720  |
| tctgaagatc gaatacgcga agcctacacg cttgaatgtg ttcaagaatg atcaggatac  | 780  |
| ttgggactac acaaacccca atctcagtg acaaggtagc cctggcagca acccaacaa    | 840  |
| acgccagagg cagccccctc tctggggaga tcaccccgca gaatatggag ggcgccacgg  | 900  |
| tgggtaccac agccattacc atgatgaggc ctacggggcc cccccacctc actacgaagg  | 960  |
| gagaaggatg ggtccaccag tgggggggtc ccgtcggggc ccaagtcgct acggccccca  | 1020 |

|             |            |            |             |            |            |      |
|-------------|------------|------------|-------------|------------|------------|------|
| gtatgggcac  | ccccccccc  | ctccccacc  | acccgagtat  | ggccctcacg | ccgacagccc | 1080 |
| tgtgctcatg  | gtctatggct | tggatcaatc | taagatgaac  | ggtgaccgag | tcttcaatgt | 1140 |
| cttctgctta  | tatggcaatg | tggagaaggt | gaaattcatg  | aaaagcaagc | cggggggcgc | 1200 |
| catggctggag | atggctgatg | gctacgctgt | agaccgggccc | attaccacc  | tcaacaacaa | 1260 |
| cttcatgttt  | gggcagaagc | tgaatgtctg | tgtctccaag  | cagccagcca | tcatgcctgg | 1320 |
| tcagtcatac  | gggttggaag | acgggtcttg | cagttacaaa  | gacttcagtg | aatcccgga  | 1380 |
| caatcggttc  | tccaccccag | agcaggcagc | caagaaccgc  | atccagcacc | ccagcaacgt | 1440 |
| gctgcacttc  | ttcaacgccc | cgctggaggt | gaccgaggag  | aacttctttg | agatctgcga | 1500 |
| tgagctggga  | gtgaagcggc | catcttctgt | gaaagtattc  | tcaggcaaaa | gtgagcgag  | 1560 |
| ctcctctgga  | ctgctggagt | gggaatccaa | gagcgatgcc  | ctggagactc | tgggcttct  | 1620 |
| gaaccattac  | cagatgaaaa | acccaatgg  | tccataccct  | tacactctga | agttgtgttt | 1680 |
| ctccactgct  | cagcagcct  | cctaattagg | tgcctaggaa  | gagtcaccat | tgagcaggaa | 1740 |
| gacatttctc  | tttcttctat | gccatttttt | gtttttgtta  | tttgcaaaag | atcttgtatt | 1800 |
| cctttttttt  | tttttttttt | tttaaagtct | aggtttgtag  | aggcttactt | aaccttaatg | 1860 |
| gaaacgctgg  | aaatctgcag | ggggaggagg | aggggaactg  | ttatctccca | agattaacct | 1920 |
| tcacttttaa  | aaaattattg | tacatgtgat | tttttttttt  | cctgttcata | catttgtgct | 1980 |
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<210> 12

<211> 3453

<212> DNA

<213> NM\_001144.3| Homo sapiens autocrine motility factor receptor (AMFR), transcript variant 1, mRNA

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| <400> 12   |            |            |            |            |            |     |
| gggcccgcgc | agaggcccgc | ccgcagcgca | gggaagcctg | ggggccagag | gtcgccgctg | 60  |
| ccgccatgcc | gotgctcttc | ctcgagcgct | tcccctggcc | cagcctccgc | acctacacgg | 120 |
| gcctcagcgg | cctggccctg | ctgggcacca | tcatcagcgc | ctaccgcgcg | ctcagccagc | 180 |
| ccgaggccgc | ccccggcgag | ccggaccagc | taacggcctc | gtgacgcctc | gagccgcgcg | 240 |
| cgcccgccgc | gccgagcgcc | gggggaaccc | gggcccgcga | tgtggcccag | tacctgctct | 300 |

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| cagacagcct | cttcgtgtgg | gttctagtaa | ataccgcttg | ctgtgttttg | atgttggtgg | 360  |
| ctaagctcat | ccagtgatt  | gtgtttggcc | ctcttcgagt | gagtgagaga | cagcatctca | 420  |
| aagacaaatt | ttggaatttt | attttctaca | agttcatttt | catctttggt | gtgctgaatg | 480  |
| tccagacagt | ggaagaggtg | gtcatgtggt | gcctctgggt | tgccggactt | gtctttctgc | 540  |
| acctgatggt | tcagctctgc | aaggatcgat | ttgaatatct | ttccttctcg | cccaccaacg | 600  |
| cgatgagcag | ccacggtcga | gtcctgtccc | tgttggttgc | catgctgctt | tcctgctgtg | 660  |
| gactggcggc | cgtctgtccc | atcccggt   | acaccacagg | aatgcacacc | ttggctttca | 720  |
| tggctgcaga | gtctcttctt | gtgacagtga | ggactgctca | tgtgatttta | cgatacgtaa | 780  |
| ttcacctctg | ggacctcaac | cacgaaggga | cgtgggaagg | aaaggggacg | tatgtctatt | 840  |
| acacagactt | tgctcatggg | ctcactctcc | tgtccctgga | cctcatgcac | catattcaca | 900  |
| tgttgttatt | tggcaacato | tggttatcca | tggccagcct | ggctcatctt | atgcagctgc | 960  |
| gttacctgtt | tcattgagtg | caacgtcgaa | ttcgtcgga  | caagaactat | ctacgtgtgg | 1020 |
| ttggaaacat | ggaggccagg | tttgacgttg | caactccaga | ggagctggct | gtcaacaatg | 1080 |
| acgactgtgc | catctgttgg | gactccatgc | aggctgcgcg | gaaaactgcc | tgtggacatc | 1140 |
| ttttccacaa | ctctctgtct | cgttctcggc | tagaacaaga | cacctctgtg | ccaacatgca | 1200 |
| gaatgtctct | taatattgcc | gacaataatc | gtgtcaggga | agaacatcaa | ggagagaact | 1260 |
| tggatgagaa | tttggttcct | gtagcagcag | ccgaaggagg | acctcgctta | aaccaacaca | 1320 |
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| aagtgtgca  | caccaccaac | attcttgcca | ttacgcagcg | cagcaactcc | cagctcaatg | 1440 |
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| gtgagggtga | agacttcgag | gctcgtggga | gccgcttctc | caagtctgct | gatgagagac | 1800 |
| agcgcattgt | ggtgcagcgt | aaggacgaac | tcctccagca | agctcgcaaa | cgtttcttga | 1860 |
| acaaaagtgc | tgaagatgat | cgggcctcag | agagcttctc | ccctcggaag | ggtgcgtcct | 1920 |
| ctgacccctg | gacctgcgt  | cgaaggatgc | tggtgccgcg | cgcggaacgg | aggcttcaga | 1980 |

|             |            |             |             |             |             |      |
|-------------|------------|-------------|-------------|-------------|-------------|------|
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| attgccgctg  | tataaagcat | gtgggtcttat | agtgtttgga  | cagctgataa  | atttaactct  | 2160 |
| tctttgtaat  | actttctatg | tgacattttct | cttccccctta | gaaacactgc  | aaatttttaac | 2220 |
| tgtaggtatg  | atctcttctg | gtgttgactg  | gactgcttgg  | ggtagggggac | gatcaggagg  | 2280 |
| aagtgagcag  | tgccttgcc  | gcagcaggca  | gcttctactc  | ctgcctcatg  | catacgtccc  | 2340 |
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| aagcatgtag  | actgtgccag | aggccagacc  | cacgggctca  | tgcacccctg  | agccagcagg  | 2520 |
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| atttctgtga  | tttttttttt | taatttggtt  | tgctgagagc  | atagctattt  | gtttttattg  | 3420 |
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<210> 13

<211> 1351

<212> DNA

<213> NM\_013974.1| Homo sapiens dimethylarginine dimethylaminohydrolase 2 (DDAH2), mRNA

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<210> 14

<211> 4180



<212> DNA

<213> NM\_006291.2| Homo sapiens tumor necrosis factor, alpha-induced protein 2 (TNFAIP2), mRNA

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| ctgacaccat | ccagcacttc | tgcacccagc | acggctcccc  | ggcgacctgg | ctgcagcctg  | 1860 |
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| tggccactta | tgccacctgc | tacctgact  | tcagcaaagg  | ccacctgagc | gctatcctgg  | 1980 |
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| ctctggcctt | tcattttttg | aggctgaacc | taattcttga  | cttcaggctc | ctccatcttc  | 3180 |

|            |             |             |             |             |             |      |
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| tcaagtgate | ctcttgtctc  | agtccccga   | gacaatcccc  | cacgcccaga  | tacatatctt  | 3420 |
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<210> 15

<211> 2524

<212> DNA

<213> NM\_000249.2| Homo sapiens mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) (MLH1), mRNA

|            |  |
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| gcgggggaag | tatccagcgc gccagctaat gctatcaaag agatgattga gaactgttta 180 |
| gatgcaaaat | ccacaagtat tcaagtgatt gttaaagagg gaggcctgaa gttgattcag 240 |
| atccaagaca | atggcaccgg gatcaggaaa gaagatctgg atattgtatg tgaagggttc 300 |

|  |      |
|--|------|
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| ggtgagcctt tggccagcat aagccatgtg gctcatgtta ctattacaac gaaaacagct  | 420  |
| gatggaaagt gtgcatacag agcaagttac tcagatggaa aactgaaagc cctcctctaa  | 480  |
| ccatgtgctg gcaatcaagg gacccagatc acggtggagg acctttttta caacatagcc  | 540  |
| acgaggagaa aagctttaa aaatccaagt gaagaatatg ggaatattt ggaagtgtt     | 600  |
| ggcaggattt cagtacacaa tgcaggcatt agtttctcag ttaaaaaaca aggagagaca  | 660  |
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| ttcatcaacc atcgtcttgt agaatcaact tccttgagaa aagccataga aacagtgtat  | 900  |
| gcagcctatt tgcccaaaaa cacacacca ttctgtacc tcagttaga aatcagtcct     | 960  |
| cagaatgttg atgttaattg gcacccocaa aagcatgaag ttcaacttct gcacgaggag  | 1020 |
| agcatcctgg agcgggtgca gcagcacatc gagagcaagc tctgggctc caattcctcc   | 1080 |
| aggatgtact tcacccagac tttgctacca ggacttgcgt gccctctcgg ggagatgggt  | 1140 |
| aaatccacaa caagtctgac ctgctcttct acttctggaa gtatgtataa ggtctatgcc  | 1200 |
| caccagatgg ttctgacaga ttccgggaa cagaagcttg atgcattctt gcagcctctg   | 1260 |
| agcaaaacccc tgteccagtca gcccagggc attgtcacag aggataagac agatatttct | 1320 |
| agtggcaggg ctaggcagca agatgaggag atgcttgaa tccagcccc tgctgaagtg    | 1380 |
| gctgcaaaa atcagagcct ggagggggat acaacaaagg ggacttcaga aatgtcagag   | 1440 |
| aagagaggac ctacttccag caacccaga aagagacatc ggaagattc tgatgtggaa    | 1500 |
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| gatggctcca aagaaggact tgctgaatac attgttgagt ttctgaagaa gaaggctgag  | 1920 |
| atgcttcag actatttctc tttggaatt gatgaggaag ggaacctgat tggattaccc    | 1980 |
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<210> 16

<211> 1536

<212> DNA

<213> NM\_001071.1| Homo sapiens thymidylate synthetase (TYMS), mRNA

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|--|-----|
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| tcggagctgc cgcgcgcgcc cttgcccccc gccgcacagg agcgggacgc cgagccgcgt  | 180 |
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| ggcaaatgta actgtgccag ttctttccat aataaaaggc tttgagttaa ctactgagg   | 1260 |
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| caaaaacatg tatgtgcatt tcaatcccac gtacttataa agaaggttgg tgaatttcac  | 1380 |
| aagctatttt tggaaatatt ttagaatatt ttaagaattt cacaagctat tcctcaaat   | 1440 |
| ctgagggagc tgagtaaac catcgatcat gatgtagagt gtggttatga actttatagt   | 1500 |
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<210> 17

<211> 2986

<212> DNA

<213> NM\_000201.1| Homo sapiens intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1), mRNA

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| ccaggacctg gcaatgccca gacatctgtg tccccctcaa aagtcactct gccccgggga  | 180 |
| ggctccgtgc tgggtgacatg cagcacctcc tgtgaccagc ccaagttggt gggcatagag | 240 |
| accccggttc ctaaaaagga gttgctcctg cctgggaaca accggaaggt gtatgaactg  | 300 |
| agcaatgtgc aagaagatag ccaaccaatg tgctattcaa actgcctga tgggcagtca   | 360 |
| acagctaaaa ccttctctac cgtgtactgg actccagaac gggtggaact ggcaccttc   | 420 |
| ccctcttggc agccagtggt caagaacctt accctacgct gccaggtgga ggggtgggca  | 480 |
| ccccgggcca acctcaccgt ggtgctgctc cgtggggaga aggagctgaa acgggagcca  | 540 |

|             |            |             |             |            |             |      |
|-------------|------------|-------------|-------------|------------|-------------|------|
| gctgtggggg  | agccccgtga | ggtcacgacc  | acgggtgctgg | tgaggagaga | tcaccatgga  | 600  |
| gccattttct  | cgtgccgcac | tgaactggac  | ctgcggcccc  | aagggctgga | gctgtttgag  | 660  |
| aacacctcgg  | ccccctacca | gctccagacc  | tttgtctctg  | cagcgactcc | cccacaactt  | 720  |
| gtcagccccc  | gggtcctaga | ggtggacacg  | caggggacgg  | tggtctgttc | cctggacggg  | 780  |
| ctgttccagg  | tctcggaggc | ccagggtccac | ctggcactgg  | gggaccagag | gttgaacccc  | 840  |
| acagtcacct  | atggcaacga | ctccttctcg  | gccaaaggcct | cagtcagtgt | gaccgcagag  | 900  |
| gacgagggga  | cccagcggtc | gacgtgtgca  | gtaatactgg  | ggaaccagag | ccaggagaca  | 960  |
| ctgcagacag  | tgaccatcta | cagctttccg  | gcgcccacg   | tgattctgac | gaagccagag  | 1020 |
| gtctcagaag  | ggaccgaggt | gacagtgaag  | tgtgaggccc  | accctagagc | caaggtgacg  | 1080 |
| ctgaatgggg  | ttccagccca | gccactgggc  | ccgagggccc  | agctctctgt | gaaggccacc  | 1140 |
| ccagaggaca  | acggggcgag | cttctcctgc  | tctgcaaccc  | tgagggtggc | cggccagctt  | 1200 |
| atacacaaga  | accagaccgg | ggagcttcgt  | gtcctgtatg  | gcccccgact | ggacgagagg  | 1260 |
| gattgtccgg  | gaaactggac | gtggccagaa  | aattcccagc  | agactccaat | gtgccaggct  | 1320 |
| tgggggaacc  | cattgcccga | gctcaagtgt  | ctaaaggatg  | gcactttccc | actgcccacc  | 1380 |
| ggggaatcag  | tgactgtcac | tcgagatctt  | gagggcacct  | acctctgtgc | ggccaggagc  | 1440 |
| actcaagggg  | aggtcacccg | cgaggtgacc  | gtgaatgtgc  | tctccccggc | gtatgagatt  | 1500 |
| gtcatcatca  | ctgtggtagc | agcccgagtc  | ataatgggca  | ctgcaggcct | cagcacgtac  | 1560 |
| ctctataacc  | gccagcgga  | gatcaagaaa  | tacagactac  | aacaggccca | aaaagggacc  | 1620 |
| cccatgaaac  | cgaacacaca | agccacgcct  | ccctgaacct  | atcccgggac | agggcctctt  | 1680 |
| cctcggcctt  | cccatattgg | tggcagtggt  | gccacactga  | acagagtggg | agacatatgc  | 1740 |
| catgcagcta  | caactaccgg | ccttgggacg  | ccggaggaca  | gggcattgtc | ctcagtcaga  | 1800 |
| tacaacagca  | tttggggcca | tggtacctgc  | acacctaaaa  | cactaggcca | cgcactctgat | 1860 |
| ctgtagtcc   | atgactaagc | caagagggaag | gagcaagact  | caagacatga | ttgatggatg  | 1920 |
| ttaaaagtcta | gcctgatgag | aggggaagtg  | gtgggggaga  | catagcccca | ccatgaggac  | 1980 |
| atacaactgg  | gaaatactga | aacttgctgc  | ctattgggta  | tgctgaggcc | cacagactta  | 2040 |
| cagaagaagt  | ggccctccat | agacatgtgt  | agcatcaaaa  | cacaaaggcc | cacacttctt  | 2100 |
| gacggatgcc  | agcttgggca | ctgctgtcta  | ctgaccccaa  | cccttgatga | tatgtattta  | 2160 |
| ttcatttgtt  | attttaccag | ctattttattg | agtgctcttt  | atgtaggcta | aatgaacata  | 2220 |
| ggtctctggc  | ctcacggagc | tcccagtcga  | tgtcacattc  | aaggtcacca | ggtacagttg  | 2280 |

|            |            |            |            |             |            |      |
|------------|------------|------------|------------|-------------|------------|------|
| tacaggttgt | acactgcagg | agagtgcctg | gcaaaaagat | caaatggggc  | tgggacttct | 2340 |
| cattggccaa | cctgccttcc | cccagaagga | gtgatttttc | tatcggcaca  | aaagcactat | 2400 |
| atggactggg | aatggttcac | aggttcagag | attaccacgt | gaggccttat  | tcctcccttc | 2460 |
| ccccaaaaa  | tgacaccttt | gttagccacc | tccccacca  | catacatttc  | tgccagtgtt | 2520 |
| cacaatgaca | ctcagcggto | atgtctggac | atgagtgcgc | agggaaatat  | cccaagctat | 2580 |
| gccttgctct | cttgctctgt | ttgcatttca | ctgggagctt | gcactattgc  | agctccagtt | 2640 |
| tcctgcagtg | atcaggggtc | tgcaagcagt | ggggaagggg | gccaaaggtat | tggaggactc | 2700 |
| cctcccagct | ttggaagggt | catccgcgtg | tgtgtgtgtg | tgtatgtgta  | gacaagctct | 2760 |
| cgctctgtca | cccagcgttg | agtgcagtg  | tgcaatcatg | gttccactga  | gtcttgacct | 2820 |
| tttgggtcca | agtgatcctc | ccacctcagc | ctcctgagta | gctgggacca  | taggctcaca | 2880 |
| acaccacacc | tggcaaat   | gatttttttt | ttttttttca | gagacggggg  | ctcgcaacat | 2940 |
| tgcccagact | tcctttgtgt | tagttaataa | agctttctca | actgcc      |            | 2986 |

<210> 18

<211> 736

<212> DNA

<213> NM\_004492.1| Homo sapiens general transcription factor IIA, 2 (12kD subunit) (GTF2A2), mRNA

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| agaagtagga | acctcctgcc |
| gggctcgtgg | cggtctctgt |
| 60         |            |
| ccgctccgcg | gagggaaagc |
| ccttccccac | aggacatcaa |
| tgcaagcttg | aataagaaaa |
| 120        |            |
| acaaattctt | cctcctaagc |
| catggcatat | cagttatata |
| gaaatactac | tttgggaaac |
| 180        |            |
| agtcttcagg | agagcctaga |
| tgagctcata | cagtctcaac |
| agatcaccoc | ccaacttgcc |
| 240        |            |
| cttcaagttc | tacttcagtt |
| tgataaggct | ataaatgcag |
| cactggctca | gagggtcagg |
| 300        |            |
| aacagagtca | atctcagggg |
| ctctctaaat | acgtacagat |
| tctgcgataa | tgtgtggact |
| 360        |            |
| tttgacttga | atgatgttga |
| attcagagag | gtgacagaac |
| ttattaaagt | ggataaagt  |
| 420        |            |
| aaaattgtag | cctgtgatgg |
| taaaaatact | ggctccaata |
| ctacagaatg | aatagaaaaa |
| 480        |            |
| atatgacttt | tttacaccat |
| cttctgttat | tcattgcttt |
| tgaagagaag | catagaagag |
| 540        |            |
| actttttatt | tattctagaa |
| ttgcagaaat | gactacactg |
| tgctatacca | gagaattcca |
| 600        |            |



|   |     |
|---|-----|
| gtagaaagaa acttgtaact ctgtagcctc ttacatcacc tttattatac agcatgaaaa | 660 |
| accataactt ttttttaagg acaaaagtgt ttgccttcct aagaaccttc tttataaacc | 720 |
| tcatttttaa actctg   | 736 |

<210> 19

<211> 6401

<212> DNA

<213> NM\_004850.3| Homo sapiens Rho-associated, coiled-coil containing protein kinase 2 (ROCK2), mRNA

|   |      |
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| ggcttcagcc tcccggggcc ccagagggcg gggcgggtccg ggcgcggcg gtggcgggcg | 120  |
| cacttcctcg ctcccggccg aggactcctg cgggcactcg ctgaggacca ggcgaccggc | 180  |
| ggcgcgaaat tgactgaggg gcggggagcg cgtctgttcc ccgccgtccc cggcaggggc | 240  |
| gggcccggct gggcccggct gggcccggcg ggcctctggg agcagccccc aggcggggga | 300  |
| ccgccttga gaccgaagc cggagctaga ggcagcggtt gggcccgggt ggagtcggg    | 360  |
| ccggagctgg tgggttcggg gcggtgctag gccccgaggc tgcggggacct gagcgaggg | 420  |
| agcctgagtg cgggtccagc ggtggcggca tgagccggcc cccgccgacg gggaaaatgc | 480  |
| ccggcgcccc cgagaccgcg ccgggggacg ggcagggcgc gagccgccag aggaagctgg | 540  |
| aggcgctgat ccgagaccct cgctccccc tcaacgtgga gagcttgctg gatggcttaa  | 600  |
| attccttggt ccttgattta gattttcctg ctttgaggaa aaacaagaac atagataatt | 660  |
| tcttaaatag atatgagaaa attgtgaaaa aaatcagagg tctacagatg aaggcagaag | 720  |
| actatgatgt tgtaaaagtt attggaagag gtgcttttgg tgaagtgcag ttggttcgtc | 780  |
| acaaggcatc gcagaaggtt tatgctatga agcttcttag taagtttgaa atgataaaaa | 840  |
| gatcagattc tgcctttttt tgggaagaaa gagatattat ggcctttgcc aatagcccct | 900  |
| gggtggttca gcttttttat gcctttcaag atgataggta tctgtacatg gtaatggagt | 960  |
| acatgccttg tggagacctt gtaaacctta tgagtaatta tgatgtgcct gaaaaatggg | 1020 |
| ccaaatttta cactgctgaa gttgttcttg ctctggatgc aatacactcc atgggtttaa | 1080 |
| tacacagaga tgtgaagcct gacaacatgc tcttgataa acatggacat ctaaaattag  | 1140 |

|             |             |             |             |            |             |      |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| cagatTTTgG  | cacgtgtatg  | aagatggatg  | aaacagggcat | ggtacattgt | gatacagcag  | 1200 |
| ttggaacacc  | ggattatata  | tcacctgagg  | ttctgaaatc  | acaagggggg | gatggTTtct  | 1260 |
| atgggcgaga  | atgtgatttg  | tggtctgtag  | gtgttttctt  | ttatgagatg | ctagtggggg  | 1320 |
| atactccatt  | ttatgcggat  | tcacttgtag  | gaacatatag  | caaaattatg | gatcataaga  | 1380 |
| attcaactgt  | tttccctgaa  | gatgcagaaa  | tttccaaaca  | tgcaaagaat | ctcatctgtg  | 1440 |
| ctttcttaac  | agatagggag  | gtacgacttg  | ggagaaatgg  | ggtggaagaa | atcagacagc  | 1500 |
| atcctttctt  | taagaatgat  | cagtggcatt  | gggataacat  | aagagaaacg | gcagctctctg | 1560 |
| tagtacctga  | actcagcagt  | gacatagaca  | gcagcaattt  | cgatgacatt | gaagatgaca  | 1620 |
| aaggagatgt  | agaaaccttc  | ccaattccta  | aagcttttgt  | tggaaatcag | ctgcctttca  | 1680 |
| tcggatttac  | ctactataga  | gaaaatttat  | tattaagtga  | ctctccatct | tgtagagaaa  | 1740 |
| ctgattccat  | acaatcaagg  | aaaaatgaag  | aaagtcaaga  | gattcagaaa | aaactgtata  | 1800 |
| cattagaaga  | acatcttagc  | aatgagatgc  | aagccaaaga  | ggaactggaa | cagaagtgca  | 1860 |
| aatctgttaa  | tactcgcta   | gaaaaaacag  | caaaggagct  | agaagaggag | attaccttac  | 1920 |
| ggaaaagtgt  | ggaatcagca  | ttaagacagt  | tagaaagaga  | aaaggcgctt | cttcagcaca  | 1980 |
| aaaatgcaga  | atatcagagg  | aaagctgata  | atgaagcaga  | caaaaaacga | aatttggaag  | 2040 |
| atgatgttaa  | cagcttaaaa  | gatcaacttg  | aagatttgaa  | aaaaagaaat | caaaactctc  | 2100 |
| aaatatccac  | tgagaaagtg  | aatcaactcc  | agagacaact  | ggatgaaacc | aatgctttac  | 2160 |
| tgcgaaacaga | gtctgatact  | gcagcccggg  | taaggaaaaac | ccaggcagaa | agttcaaaaac | 2220 |
| agattcagca  | gctggaatct  | aacaatagag  | atctacaaga  | taaaaactgc | ctgctggaga  | 2280 |
| ctgccaaagt  | aaaacttgaa  | aagggaattta | tcaatcttca  | gtcagctcta | gaatctgaaa  | 2340 |
| ggagggatcg  | aaccatgga   | tcagagataa  | ttaatgattt  | acaaggtaga | atatgtggcc  | 2400 |
| tagaagaaga  | tttaaaagaac | ggcaaaatct  | tactagcgaa  | agtagaactg | gagaagagac  | 2460 |
| aacttcagga  | gagatttact  | gatttggaaa  | aggaaaaaaag | caacatggaa | atagatatga  | 2520 |
| cataccaact  | aaaagttata  | cagcagagcc  | tagaacaaga  | agaagctgaa | cataaggcca  | 2580 |
| caaaggcacg  | actagcagat  | aaaaataaga  | tctatgagtc  | catcgaagaa | gccaaatcag  | 2640 |
| aagccatgaa  | agaaatggag  | aagaagctct  | tggaggaaag  | aacttttaaa | cagaaagtgg  | 2700 |
| agaacctatt  | gctagaagct  | gagaaaagat  | gttctctatt  | agactgtgac | ctcaaacagt  | 2760 |
| cacagcagaa  | aataaatgag  | ctccttaaac  | agaaagatgt  | gctaaatgag | gatgttagaa  | 2820 |

|             |            |            |            |            |            |      |
|-------------|------------|------------|------------|------------|------------|------|
| acctgacatt  | aaaaatagag | caagaaactc | agaagcgctg | ccttacacaa | aatgacctga | 2880 |
| agatgcaaac  | acaacaggtt | aacacactaa | aatgtcaga  | aaagcagtta | aagcaagaaa | 2940 |
| ataaccatct  | catggaatg  | aaaatgaact | tggaaaaaca | aatgtcgaa  | cttcgaaaag | 3000 |
| aacgtcagga  | tgcatagggg | caaataaag  | agctccagga | tcagctcgaa | gcagaacagt | 3060 |
| atttctcaac  | cctttataaa | acacaagtta | gggagcttaa | agaagaatgt | gaagaaaaga | 3120 |
| ccaaacttgg  | taaagaattg | cagcagaaga | aacaggaatt | acaggatgaa | cgggactctt | 3180 |
| tggtgccca   | actggagatc | accttgacca | aagcagatto | tgagcaactg | gtctgttcaa | 3240 |
| ttgctgaaga  | acaatattct | gatttggaaa | aagagaagat | catgaaagag | ctggagatca | 3300 |
| aagagatgat  | ggctagacac | aaacaggaac | ttacggaaaa | agatgtcata | attgttcttc | 3360 |
| ttgaggaaac  | taataggaca | ctaactagt  | atgttgccaa | tcttgcaaat | gagaaagaag | 3420 |
| aattaaataa  | caaattgaaa | gatgttcaag | agcaactgtc | aagattgaaa | gatgaagaaa | 3480 |
| taagcgcagc  | agctattaaa | gcacagtttg | agaagcagct | attaacagaa | agaacactca | 3540 |
| aaactcaagc  | tgtgaataag | ttggctgaga | tcattgaatc | aaaagaacct | gtcaagcgtg | 3600 |
| gtaatgacac  | agatgtgcgg | agaaaaagaa | aggagaatag | aaagctacat | atggagctta | 3660 |
| aatctgaacg  | tgagaaattg | accagcaga  | tgatcaagta | tcagaagaa  | ctgaatgaaa | 3720 |
| tgaggccaca  | aatagctgaa | gagagccaga | ttcgaaattg | actgcagatg | acattggaca | 3780 |
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| caagattaga  | aggatggctt | tcattgcctg | tacgaaacaa | cactaagaaa | tttgatggg  | 3960 |
| ttaaaaagta  | tgtgattgta | agcagtaaga | agattctttt | ctatgacagt | gaacaagata | 4020 |
| aagaacaatc  | caatccttac | atggttttag | atatagacaa | gttatttcac | gtccgaccag | 4080 |
| ttacacagac  | agatgtgtat | agagcagatg | ctaaagaaat | tccaaggata | ttccagattc | 4140 |
| tgtatgcaa   | tgaaggagaa | agtaagaagg | aacaagaatt | tccagtggag | ccagtggag  | 4200 |
| aaaaatctaa  | ttatatattg | cacaagggac | atgagtttat | tctactctt  | tatcatttcc | 4260 |
| caaccaactg  | tgaggcttgt | atgaagcccc | tgtggcacat | gtttaagcct | cctctgctt  | 4320 |
| tgagtgccg   | ccgttgccat | attaagtgtc | ataaagatca | tatggacaaa | aaggaggaga | 4380 |
| ttatagcacc  | ttgcaaagta | tattatgata | tttcaacggc | aaagaatctg | ttattactag | 4440 |
| caaattctac  | agaagagcag | cagaagtggg | ttagtcggtt | gggtgaaaaa | atacctaaaa | 4500 |
| agccccagc   | tcagaccctt | tttgccgat  | catctcctag | aacttcaatg | aagatacagc | 4560 |

|            |             |             |             |             |            |      |
|------------|-------------|-------------|-------------|-------------|------------|------|
| aaaaccagtc | tatttagacgg | ccaagtcgac  | agcttgcccc  | aaacaaacct  | agctaactgc | 4620 |
| cttctatgaa | agcagtcatt  | attcaagggtg | atcgatattct | tccagtgaaa  | acaagactga | 4680 |
| aatatgatgg | cccaaaattt  | attaaaaagc  | tatattttcc  | tgagagactg  | atacatcac  | 4740 |
| tcatacatat | atgtgttccc  | cttttccctg  | taataataat  | tacaaatctg  | ggctcctttg | 4800 |
| aagcaacagg | ttgaaccaac  | aatgattggt  | tgatagacta  | aggatatatg  | caactcttcc | 4860 |
| agacttttcc | ataaagctct  | ctcggcagtc  | gtcacacta   | caatgcacac  | aaggattgag | 4920 |
| aagagttaaa | ggctaaagaa  | aacatctttt  | ctagcttcaa  | cagagaggtt  | tcaccagcac | 4980 |
| atttaccaga | agaatctggg  | aatggattcc  | actacagtga  | tattgactgc  | atctttaaga | 5040 |
| agtgccatt  | atactgtgta  | tatatatata  | aacacacaca  | catatatata  | tatatatata | 5100 |
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| aaaacaaaa  | aagcgtttac  | cagctcttag  | gatgtaaact  | agctttgttg  | aagataaatc | 5460 |
| gtgcactatt | tttacacata  | aatagttata  | tcaatgtcag  | cctattttga  | ttaacaaatg | 5520 |
| tttttaaagt | attattggtt  | atagaaacaa  | taatggatgg  | tgttggaact  | aatatatcct | 5580 |
| tgatgtctgt | ctattattca  | ttcaactctt  | tttacagacc  | tcagtattag  | tctgtgacta | 5640 |
| caaaatattt | tatttgcttt  | aaatttgctg  | gctaccctag  | atgtgttttt  | attctcggtg | 5700 |
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| aactaagaca | gactgtagat  | gcattttaaa  | tatttaaata  | tgatcctcag  | acatgcagct | 5820 |
| gtgtgtggga | gtatttttagt | accgggttaa  | gaaaactggc  | aactgggaag  | aagtggcctc | 5880 |
| aaaggcactt | aatttgattt  | ttatttttta  | aatgctgtca  | aagttacagt  | ttacgcagga | 5940 |
| cattcttgcc | gtattctcat  | gatccagat   | aagtgtgtgt  | tttatactgc  | aacaatatgc | 6000 |
| agcaatggta | agcgtaaagt  | tttttttttg  | tttttgtttt  | tttttatatt  | atgaagtctt | 6060 |
| ttaacagctc | ctctttatat  | aaatacacag  | agtttggtat  | gatattttaa  | tacatcatct | 6120 |
| ggccaggcat | ggtggcttac  | gctgtaatc   | ctagcacttt  | gggaggccaa  | gacggggcga | 6180 |
| tcacctgagg | tgaggagtcc  | aagaccagcc  | tgcccaacat  | agtgaaaact  | cgtctctacc | 6240 |

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<211> 1556

<212> DNA

<213> NM\_005783.3| Homo sapiens thioredoxin domain containing 9 (TXNDC9), mRNA

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 tgctgctctt tcactttcga ggcgtcaccg agagctcagc acccaggctg aactctgtac 180  
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 aagctcaaca gcagaaacaa gaatggcttt ctaaaggaca tggggaatac agagaaatcc 420  
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 acagagactc cacattcagg tgtaaaatac tagacagaca tctggcaata ttgtccaaga 540  
 aacacctcga gaccaaaatt ttgaagctga atgtggaaaa agcaccttct ctttgtgaga 600  
 gactgcatac caaagtcatt cccacactag cactgctaaa agatgggaaa acacaagatt 660  
 atgttgttgg gtttactgac ctaggaaata cagatgactt caccacagaa actttagaat 720  
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 agaaaatgta ttcagactct gatgatgatt agagctcaat aattctttgt aaattgtctt 900  
 tttttttctg cttcagattt aaatgtggtt ttaaaattct attaatgtct atacattggg 960  
 cacctaaata ctcatattct cgagttttat acagttgtat cacatcgaaa agtgtcttta 1020  
 ctgttttctg tgtggccacc atgtttaagt tgaggaaaac tcagttctta aattatctgg 1080  
 gaagggtctg gattctctat ttttgagatt gactttatca caatatgatt ctacatctt 1140  
 tataccattt acaattgtgt tttagatcta cagagttaga aattcgaaaa ctattccagg 1200

|  |      |
|--|------|
| actaattctt aatcgccatt atttatataa gaggtcaagt aacatttact agcgcaatac  | 1260 |
| tgcacttgta aatgaattat aaacgctctt ctggaatata tttaaataac cattaagaa   | 1320 |
| ctgcttattc attctggaca ctgcatgttg atgttgaatc aactgatgcc agcagaaagc  | 1380 |
| tatttttgatt tgtgaacata ctgccttatt taaaggggcc tgattgcttg tattttaaga | 1440 |
| cattcattaa aaagaaacca ggaacaactt ttgaaataac agcataagga acttactgt   | 1500 |
| ctctgctcaa taaataacct gtaactggaa aaaaaaaaaa aaaaaaaa aaaaaa        | 1556 |

<210> 21

<211> 1276

<212> DNA

<213> NM\_003581.1| Homo sapiens NCK adaptor protein 2 (NCK2), mRNA

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|---|-----|
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| ctacaccgcc cagcaggacc aggagctgga catcaagaag gtgaacgagc ggctgtggtt | 120 |
| gctggacgac tccaagacgt ggtggcgggt gaggaacgag gccaacagga cgggctatgt | 180 |
| accgtccaac tacgtggagc ggaagaacag cctgaagaag ggctccctgc tgaagaacct | 240 |
| gaaggacaca ctaggcctcg gcaagacgag caggaagacc agcgcgcggg atgcgtcccc | 300 |
| cacgcccagc acggacgcgc agtaccgcc caatggcagc ggcgccgacc gcattacga   | 360 |
| cctcaacatc ccggccttcg tcaagttcgc ctatgtggcc gagcgggagg atgagttgc  | 420 |
| cctggtgaag ggtgcgcgcg tcaccgtcat ggagaagtgc agcgacgggt ggtggcgggg | 480 |
| cagctacaac gggcagatcg gctggttccc ctccaactac gtcttgaggg aggtggacga | 540 |
| ggcggctgcg gagtccccc gcttctctgag cctgcgcaag ggcgctcgcg tgagcaatgg | 600 |
| ccagggctcc cgcgtgctgc atgtgttcca gacgtgtac cccttcagct cagtcaccga  | 660 |
| ggaggagctc aacttcgaga agggggagag catggagggt attgagaagc cggagaacga | 720 |
| ccccgagtgg tggaaatgca aaaatgccg ggccagggt ggccctctgc ccaaaaacta   | 780 |
| cgtggtggtc ctcagtgagc ggctgcctc gcacctgcg cagcggccac agataagcta   | 840 |
| caccggggcc tcgtccagcg ggcgcttcgc gggcagagag tggactacg ggaacgtgac  | 900 |
| gcggcaccag gcgcagtgcg ccctcaacga gcggggcgtg gagggcgact tcctcattag | 960 |

ggacacgcag tctctgcccc ggcacttctc cgtgtccctt aaagcgtcag ggaagaacaa 1020  
 acacttcaag gtgcagctcg tggacaatgt ctactgcatt gggcagcggc gttccacac 1080  
 catggacgag ctggtggaac actacaaaaa ggccgccatc ttcaccagcg agcacgggga 1140  
 gaagctctac ctctgcaggg cctgcagtg acggcgcccc ggcaccacac tgcctcccg 1200  
 ggccccacgg tggagctgcc cgccccgect tgtggcagag gtcctcccg cggggacggc 1260  
 cccgacggct tctctg 1276

<210> 22

<211> 1577

<212> DNA

<213> NM\_006214.2| Homo sapiens phytanoyl-CoA hydroxylase (Refsum disease)  
 (PHYH), mRNA

<400> 22  
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 cgccgggggc tgtcgtagct catcccaact cagggaactat ttctctgcc agtttccatc 180  
 ctcaacaatt ccagtatact ctggataata atgttctaac cctggaacag aaaaaatttt 240  
 atgaagaaaa tgggtttcta gtaataaaaa atcttgtacc tgatgccgat attcaacgct 300  
 ttccgaatga gtttgaaaaa atctgcagaa aggaggtgaa accattagga ttaacagtaa 360  
 tgagagatgt gaccatttcg aaatccgaat atgctccaag tgagaagatg atcacgaagg 420  
 tccaggattt ccaggaagat aaggagctct tcagatactg cactctcccc gagattctga 480  
 aatatgtgga gtgcttcact ggacctataa ttatggccat gcacacaatg ttgataaaca 540  
 aacctccaga ttctggcaag aagacgtccc gtcaccccct gccaccgagc ctgcactatt 600  
 tccccctcag gccacgcgat ctcatcggtt gcgcctggac ggcgatggag cacatcagcc 660  
 ggaacaacgg ctgtctggtt gtgctcccag gcacacacaa gggctccctg aagccccacg 720  
 attaccccaa gtgggagggg ggagttaaca aaatgttcca cgggatccag gactacgagg 780  
 aaaacaaggc ccgggtgcac ctgggtgatg agaaggcgca cactgttttc ttccatcctt 840  
 tgctcatcca cggatctggt cagaataaaa cccagggatt ccggaaggca atttctgcc 900  
 atttcgccag tgccgattgc cactacattg acgtgaaggg caccagtaaa gaaaacatcg 960

|             |             |            |            |            |            |      |
|-------------|-------------|------------|------------|------------|------------|------|
| agaaggaagt  | tgttaggaata | gcacataaat | tctttggagc | tgaaaatagc | gtgaacttga | 1020 |
| aggatatttg  | gatgtttcga  | gctcgacttg | tgaaggaga  | aagaaccaat | ctttgaaata | 1080 |
| gccatctgct  | ataactcttt  | caacagaaaa | ccaaaacca  | acgaaatgic | taaggaaaat | 1140 |
| gttttcttaa  | tgagatgatg  | taaccttttc | tatcacttgt | taaaagcaga | aaacatgtat | 1200 |
| cagggtactta | attgcataga  | gttagttttg | cagcacaatg | gtgttgcttt | aatggaaaaa | 1260 |
| aaaaacagta  | aaagtgaat   | attactgttt | taaggaaaac | taatttaggg | tggcagccaa | 1320 |
| taaagggtgt  | tggtgtctaa  | tttaagtgtt | aaatcaattt | ctttcattca | gttagctctt | 1380 |
| tacccaagaa  | gaagtgaatg  | atttgagctg | tagggatgtg | tttgtatccc | ctttctgata | 1440 |
| aaccatttcc  | ctaccaattt  | tatgtcataa | gagatttttt | tcccccaaat | ctagaacaat | 1500 |
| gtataataca  | ttcacatcta  | gtcaagggca | taggaacggt | gtcatggagt | ccaaataaag | 1560 |
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<210> 23

<211> 3060

<212> DNA

<213> NM\_004739.2| Homo sapiens metastasis-associated gene family, member 2 (MTA2), mRNA

|            |            |
|------------|------------|
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| tccggaagga | ggcgaaacct |
| gagcggggcc | cggaagcct  |
| tcctgcggc  | cgcgagagcc |
| 60         |            |
| caacgactag | tgggactccg |
| cgggggcggg | ggtagctgga |
| gcctggctct | ggcctggcag |
| 120        |            |
| gagccgagct | gtgtccgaa  |
| gaagccgagc | ggacgggggc |
| cagcctcagc | gtcccgggag |
| 180        |            |
| tgaggcgata | gctgcggcgg |
| cgacagcgcg | ggcgggatg  |
| aaccgcgacg | gctgaggcag |
| 240        |            |
| cggaggtgcc | ggctgcgcgg |
| gccccagtga | gactccctcg |
| aagcggcagc | ccaccgttcg |
| 300        |            |
| gggctttgcc | tcgagccgag |
| ccctgcccc  | gcgagcctcc |
| cggacccttt | tgtgcggccg |
| 360        |            |
| gaggcggcgg | cgggaaacgc |
| catggcgccc | aacatgtacc |
| gggtgggaga | ttacgtctat |
| 420        |            |
| tttgagaact | cttcacgcaa |
| tccttacctg | gttagacgga |
| ttgaggagct | caacaagact |
| 480        |            |
| gcaaatggaa | atgtggagcg |
| aaaggttgtc | tgtcttttcc |
| ggcgcaggga | catttctagt |
| 540        |            |
| agcctcaaca | gcctggctga |
| tagtaatgcc | agggagtgtg |
| aagaggaatc | aaagcagcca |
| 600        |            |
| ggggtgtctg | agcagcagcg |
| ccatcaactg | aagcaccggg |
| aactttttct | ttctcgccaa |
| 660        |            |



|             |             |             |             |            |             |      |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| tttgaatcat  | taccagccac  | ccacatacgg  | gggaaatgca  | gtgtgacct  | cttgaatgag  | 720  |
| acagatatct  | tgagccagta  | cctggaaaag  | gaggactgct  | ttttttactc | actggtgttt  | 780  |
| gaccccgctg  | agaagacact  | tctcgctgat  | cagggcgaga  | ttagagtgtg | ttgcaaatatc | 840  |
| caagctgaga  | tcccagatcg  | cctagtagag  | ggagaatctg  | ataatcgga  | ccagcagaag  | 900  |
| atggagatga  | aggctctggga | cccagacaac  | cctctcacag  | accggcagat | cgaccagttt  | 960  |
| cttgtggtgg  | cccagactgt  | gggaaccttt  | gcaagagccc  | tagattgtag | cagctccatt  | 1020 |
| cggcagccaa  | gcttgacacat | gagtgacagct | gctgcctccc  | gagatatcac | tctgtttcac  | 1080 |
| gccatggata  | ccttgcaaa   | gaacggctac  | gacctggcta  | aggccatgtc | gaccttggtg  | 1140 |
| ccccaggagg  | gcccgggtgt  | gtgtcgggat  | gagatggagg  | aatggtcagc | ctcagaggcc  | 1200 |
| atgctatttg  | aggaggccct  | agagaagtat  | gggaaggact  | tcaatgatat | tgcaggagat  | 1260 |
| tttctaccct  | ggaagtcact  | tgccagcata  | gtccagtttt  | attacatgtg | gaaaaccaca  | 1320 |
| gaccggtata  | ttcagcagaa  | aagggtgaaa  | gctgctgaag  | cagacagcaa | actgaaacag  | 1380 |
| gtctacattc  | ccacctacac  | taagccaaac  | cctaaccaga  | tcattttctg | gggttcaaaa  | 1440 |
| cctggcatga  | atggggctgg  | atttcagaag  | ggcctgaact  | gtgagagtgt | ccaccaccaca | 1500 |
| cagtctgtct  | agtggtatgc  | ctggggccca  | cctaactatc  | agtgcgcct  | ctgtgcttcc  | 1560 |
| tggtggatct  | actggaagaa  | gtatggggga  | ctgaagaccc  | caactcagct | tgagggggcc  | 1620 |
| actcggggca  | ccacggagcc  | acactcaagg  | ggtoatttat  | ccagacctga | agctcaaaagt | 1680 |
| ctctctcctt  | acacaaccag  | cgccaacagg  | gccaaagctac | tggctaagaa | cagacaaaact | 1740 |
| ttcctgcttc  | agaccacaaa  | gctgacccgt  | cttgccagac  | gcattgtgag | ggacctatta  | 1800 |
| cagccaagga  | gggcccggcg  | acggccttat  | gtcctctatca | atgccaatgc | catcaaaagca | 1860 |
| gagtgctcca  | ttcgacttcc  | taaggccggc  | aagaactccat | tgaagattca | ccctctggtg  | 1920 |
| cggtgcgcc   | tggaactat   | cgtaaaagat  | ctggtggccc  | aggcaccctc | gaaacaaaa   | 1980 |
| acacctcggg  | gtaccaagac  | accgatcaac  | agaaaccagc  | tgtcccagaa | ccggggagctg | 2040 |
| ggggggcatta | tggtgaaacg  | ggcctatgag  | actatggcag  | gggcaggggg | tcccttctct  | 2100 |
| gccaatggaa  | ggcctctggc  | ttcagggatt  | cgttcaagct  | cacagccagc | agccaagcgt  | 2160 |
| cagaaactaa  | accagctgta  | tgcccccaat  | cctgtggtgt  | ttgtggccac | aaaggatacc  | 2220 |
| agggccctac  | ggaaggctct  | gacccatctg  | gaaatgcggc  | gagctgctcg | ccgaccacaac | 2280 |
| ttgcccctga  | agggtgaagc  | aacgctgatt  | gcagtgcggc  | cccctgtccc | tctacctgca  | 2340 |
| ccctcacatc  | ctgccagcac  | caatgagcct  | attgtcctgg  | aggactgagc | acctgtgggg  | 2400 |

|             |            |            |            |            |            |      |
|-------------|------------|------------|------------|------------|------------|------|
| aagggagggtg | ggctgagagg | tagagggtgg | atgccaggg  | cacccaaacc | tccttcct   | 2460 |
| ttcgtgtcga  | agggagtgag | gagtgaatta | aggaagagag | caagtgagtg | tggtccctg  | 2520 |
| gaggggttg   | gcgcctctg  | gtgttaccac | ctcgagactt | gtctcatgcc | tccatgcttg | 2580 |
| ccgatggagg  | acagactgca | ggaacttggc | ccatgtggga | acctagcctg | ttttggggg  | 2640 |
| taggacccac  | agatgtcttg | gacagttttg | gggggagggt | tttttaattt | tttaaagtt  | 2700 |
| ttgcctcct   | ttgtgaaagg | ggatggggag | gggaagagta | aacagataac | aggtggtggt | 2760 |
| acctggttg   | ggggggggg  | cgtgcactgc | catgtctttt | ttttttttt  | ttttttttt  | 2820 |
| tttctaatt   | gggggtttct | ctttctgtcc | ggtgtccgga | ctttccta   | tgagtttga  | 2880 |
| ggccccctaa  | ctggcatcaa | ccccaggcca | cgtcgtctct | ttccttcct  | ccccccccc  | 2940 |
| tctgcctttt  | gtacgccagt | tctcagaaat | aaagatcttt | tgctcgtttt | tttaacctcg | 3000 |
| gattctgtaa  | ttggttctta | tagtaacaaa | taaaaagctg | ttttcttcag | cttctcctgg | 3060 |

<210> 24

<211> 2407

<212> DNA

<213> NM\_001091.1| Homo sapiens amiloride binding protein 1 (amine oxidase (copper-containing)) (ABP1), mRNA

|            |             |
|------------|-------------|
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| ctggaagcag | agcgaactgg  |
| gagcagagca | cacagagccg  |
| 60         |             |
| tggagcgaga | gatgccggcc  |
| ctgggtctgg | ccgtggctgc  |
| catcctgatg | ctgcagacgg  |
| 120        |             |
| ccatggcgga | gcctccccc   |
| gggactctgc | ccaggaaggc  |
| aggggtgttt | tcagacctaa  |
| 180        |             |
| gcaaccaaga | gctgaaggca  |
| gtgcacagct | tctctgggtc  |
| caagaaggag | ctgaggctgc  |
| 240        |             |
| agccctccag | taccaccacc  |
| atggccaaga | acaccgtgtt  |
| tctcatcgag | atgctgctgc  |
| 300        |             |
| ccaagaagta | ccatgtgtcg  |
| aggtttctgg | ataaagggtga |
| aaggcatcct | gtgcgggaag  |
| 360        |             |
| cccgtgccgt | catcttcttt  |
| ggtgaccagg | agcatcccaa  |
| tgtaaccagg | tttgctgtgg  |
| 420        |             |
| ggccctgcc  | agggccctgc  |
| tacatgcgag | cactgtcccc  |
| caggcctggg | taccagtctc  |
| 480        |             |
| cctgggcctc | gagggccctc  |
| tcacacgcag | agtatgccct  |
| cctctaccac | acctctgcag  |
| 540        |             |
| aagccaccaa | gccctgcgat  |
| cagttcttcc | tcaataccac  |
| aggcttctca | ttccaagact  |
| 600        |             |
| gccatgacag | atgcctggcc  |
| ttcaccgatg | tgcccccccg  |
| gggtgtggct | tctggccagc  |
| 660        |             |

|  |      |
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| gccgcagttg gcttatcata cagcgctatg tagaaggcta cttttgacac ccactgggc   | 720  |
| tggagctcct cgtggatcat gggagcacag atgctgggca ctgggcccgtg gacaggtgt  | 780  |
| ggtacaacgg gaagttctat gggagcccag aggaactggc tcggaagtat gcagatggag  | 840  |
| aggtggacgt ggtggtcctg gaggaccccg tgccctgggg caaggggcat gacagcacag  | 900  |
| aggagccgcc cctettctcc tcccacaagc ccgcggggga ctccccagc cccatccatg   | 960  |
| tgagcggccc ccgcttggtc cagccccacg gccctcgctt caggctggag ggcaacgtg   | 1020 |
| tgtctacgg cggctggagc tttgccttcc ggctgcgtcc ctccctccgg ctgcaggctcc  | 1080 |
| tgaacgtgca cttcggcgga gagcgattg cctatgaggt cagcgtgcaa gaggcagtgg   | 1140 |
| cgctgtatgg aggacacaca cctgcaggca tgcagaccaa gtacctcgat gtcggctggg  | 1200 |
| gcctgggcag cgtcactcat gaggtagccc ccggcatcga ctgccccgag accgccacct  | 1260 |
| tcctggacac tttccactac tatgatgccg atgacccggt ccattatccc cgagccctct  | 1320 |
| gcctcttga aatgccaca ggggtgcccc ttcggcgga ctttaattcc aactttaag      | 1380 |
| gtggcttcaa cttctatgcg gggctgaagg gccagtgct ggtgctgcgg acaacttcaa   | 1440 |
| ctgtctacaa ttatgattac atttgggact ttatcttcta ccccaacggg gtgatggagg  | 1500 |
| ccaagatgca tgccactggc tacgtccacg ccaccttcta cccccccag gggctgcgcc   | 1560 |
| acggcactcg cctgcacacc cacctgattg gcaacataca cactcacttg gtgcactacc  | 1620 |
| gcgtagacct ggatgtggca ggcaccaaga acagcttcca gacactgcag atgaagctag  | 1680 |
| aaaacatcac caacccctgg agcccaagac accgcgtggt ccagccaaact ctggagcaga | 1740 |
| cgcagtactc ctgggagcgc cagcgggcct tccgcttcaa aaggaagctg cccaagtacc  | 1800 |
| tgtcttttac cagccccag gagaaccct ggggccacaa gcgcagctac cgctgcaga     | 1860 |
| tccactccat ggccgaccag gtgctgcccc caggctggca ggaggagcag gccatccact  | 1920 |
| gggcaaggtg cccctggga gtgaccaagt accgggagtc ggagctgtgc agcagcagca   | 1980 |
| tctaccacca gaacgacccc tggcacccgc ccgtggtctt tgagcagttt cttcacacaa  | 2040 |
| acgagaacat tgaaaatgag gacctggtgg cctgggtgac ggtgggcttc ctgcacatcc  | 2100 |
| ccactcaga ggacattccc aacacagcca cacctgggaa ctccgtgggc ttctgctcc    | 2160 |
| ggccattcaa cttcttccca gaggaccct cctggcctc cagagacct gtgatcgtgt     | 2220 |
| ggcctcggga caacggcccc aactacgtcc agcgtggat cctgaggac agggactgct    | 2280 |
| cgatgcctcc cccttttagc tacaatggga cctatagacc tgtgtgacca gccccagtt   | 2340 |

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gagcctc 2407

<210> 25

<211> 1094

<212> DNA

<213> NM\_000712.3| Homo sapiens biliverdin reductase A (BLVRA), mRNA

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agtgaaccgaa ggaagagacc aagatgaatg cagagcccgaggagaaagttt ggcgtgggtgg 120  
tggttggtgt tggccgagcc ggctccgtgc ggatgagggc cttgcggaat ccacaccctt 180  
cctcagcgtt cctgaacctg attggcttcg tctcgagaag ggagctcggg agcattgatg 240  
gagtcacgaa gattttcttg gaggatgctc ttccagcca agaggtggag gtgcctata 300  
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acgtccttgt ggaatacccc atgacactgt cattggcggc cgctcaggaa ctgtgggagc 420  
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cagctggccc gttggaagaa gagcggtttg gcttcctgc attcagcggc atctctcgcc 600  
tgacctggct ggtctccctc ttgggggagc ttctcttgt gctcgccact ttggaagagc 660  
gaaaggaaga tcagtatatg aaaatgacag tgtgtctgga gacagagaag aaaagtccac 720  
tgtcatggat tgaagaaaaa ggacctggtc taaaacgaaa cagatatatta agcttccatt 780  
tcaagtctgg gtctctggag aatgtgccc aaatgaggag gaataagaac atatttctga 840  
aagatcaaaa tatatttgtc cagaaactct tgggccagtt ctctgagaag gaactggctg 900  
ctgaaaagaa acgcatcctg cactgcctgg ggcttgacga agaaatccag aaatatgct 960  
gttcaaggaa gtaagaggag gagtgatgt agcacttcca agatggcacc agcatttggt 1020  
tcttctcaag agttgacctt tatctctatt cttaaaatta aacatgttgg ggaacaaga 1080  
aaaaaaaaaaaa 1094

<210> 26

<211> 5546

<212> DNA

<213> NM\_000933.2| Homo sapiens phospholipase C, beta 4 (PLCB4), transcript variant 1, mRNA

<400> 26  
aggaaaagac aatttctctc tgattcagaa tcttgaaaaat gtgatctccc ttaaaaagag 60  
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| aaagtttcaa | ggtttccatg | tggcagaaga  | acgcaatatt | cattataaca  | tgctttcttt  | 1920 |
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| gaaatcctgt catgcagtg cccaaacgca aggcgaagga gatgcagcag atggtgaaat   | 3660 |
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| ctttaattca cactgttaga gagcaaaatc atctaagtat tggccatgca caagattagt  | 4560 |
| aaacaggaat actagaacta tgtttgcatg atacacaagc accaataaag actaatccat  | 4620 |
| acacagtaa cctaagtgca aataaatact ggtaataata atgtatggca cagaataata   | 4680 |
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|             |            |            |            |             |            |      |
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| ctgctgtagt  | tgagttgcag | acagtgcacg | aaaaagtatt | ccgctgggaa  | ttgagccatg | 4980 |
| ccaccaaaagc | caagaggagc | gcacggaaac | ccggtagtct | agaactaatc  | agattactga | 5040 |
| tttttagggc  | cagcaccaga | tgaattgttg | tatatgcttg | taaaaattga  | ttctgtgtgt | 5100 |
| tcctctgaac  | aaagcggaga | aaatgatgat | accatcaata | ttgaaattaa  | aottccaact | 5160 |
| tctctaataa  | aaaattaaaa | cacgcataac | actcgtcaag | agtatttgct  | cccaagacac | 5220 |
| attctagcaa  | atgtttttgc | tttttcatat | acatgatatc | atcgttattt  | tcaaaggggg | 5280 |
| cttattaata  | ccctcagcat | gtttttcacc | caaatgatgc | aaaacatgca  | gattctagtt | 5340 |
| gacttcagtt  | gtaatagact | tgttttttct | ctatttatga | tttgaagtgg  | attctgtaaa | 5400 |
| atatctcttg  | ttcttagttt | ccttatctgt | aaaacagtgg | agtttagacta | catatctttt | 5460 |
| ggcactaaca  | tctcatgaaa | aattatgggt | aataaaatat | caccacattt  | ggattgccaa | 5520 |
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<210> 27

<211> 2545

<212> DNA

<213> NM\_002416.1| Homo sapiens chemokine (C-X-C motif) ligand 9 (CXCL9), mRNA

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| ttctctcttg | gcacatcttt | gctgggtctg attggagtc aaggaacccc agtagtgaga 120    |
| aagggtcgct | gttctcgcat | cagcaccaac caagggacta tccacctaca atccttgaaa 180   |
| gaccttaaac | aatttgcccc | aagcccttcc tgcgagaaaa ttgaaatcat tgctacactg 240   |
| aagaatggag | ttcaaacatg | tctaaacca gattcagcag atgtgaaggc actgattaaa 300    |
| aagtgggaga | aacaggtcag | ccaaaagaaa aagcaaaaga atgggaaaaa acatcaaaaa 360   |
| aagaaagttc | tgaaggttcg | aaaatctcaa cgttctctgc aaaagaagac tacataagag 420   |
| accacttcac | caataagtat | tctgtgttaa aaatgttcta ttttaattat accgctatca 480   |
| ttccaaagga | ggatggcata | taatacaaaag gcttattaat ttgactagaa aattttaaacc 540 |
| attactctga | aattgtaact | aaagttagaa agttgatttt aagaatccaa acgttaagaa 600   |



|            |             |            |            |            |             |      |
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| ttaaggccat | gatttttagca | atacccatgt | ctacacagat | gttcacccaa | ccacatccca  | 720  |
| ctcacaacag | ctgcctggaa  | gagcagccct | aggtttccac | gtactgcagc | ctccagagag  | 780  |
| tatctgaggc | acatgtcagc  | aagtcctaag | cctgttagca | tgtcgttgag | ccaagcagtt  | 840  |
| tgaattgag  | ctggacctca  | ccaagctgct | gtggccatca | acctctgtat | ttgaatcagc  | 900  |
| ctacaggcct | cacacacaat  | gtgtctgaga | gattcatgct | gattgttatt | gggtatcacc  | 960  |
| actggagatc | accagtggtg  | ggctttcaga | gcctccttct | tggctttgga | agccatgtga  | 1020 |
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| catatgctct | gatttatctg  | agtcaactcc | tttctcatct | tgtccccaac | acccacacaga | 1200 |
| agtgttttct | tctcccaatt  | catctcact  | cagtccagct | tagttcaagt | cctgcctctt  | 1260 |
| aaataaacct | ttttggacac  | acaaattatc | ttaaaactcc | tgtttcactt | ggttcagtac  | 1320 |
| cacatgggtg | aacactcaat  | ggttaactaa | ttcttgggtg | tttatcctat | ctctccaacc  | 1380 |
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| aaaatcatat | aatcttcaaa  | tgaaggagac | tttatagatc | agccagtgc  | caaccttttc  | 1800 |
| ccaaccatac | aaaaattcct  | tttccogaag | gaaaagggtc | ttctcaataa | gcctcagctt  | 1860 |
| tctaagatct | aacaagatag  | ccaccgagat | ccttatcgaa | actcatttta | ggcaaatatg  | 1920 |
| agttttattg | tcctgttact  | tgtttcagag | tttgtattgt | gattatcaat | taccacacca  | 1980 |
| tctcccatga | agaaagggaa  | cggtgaagta | ctaagcgcta | gaggaagcag | ccaagtgggt  | 2040 |
| tagtggaagc | atgattgggt  | cccagtttag | ctctgcagga | tgtggaaacc | tccttccagg  | 2100 |
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| tcccacccga | acgtcttctc  | taatcatgaa | actccctagt | tccttcatgt | aacttccctg  | 2280 |
| aaaaatctaa | gtgtttcata  | aatttgagag | tctgtgaccc | acttaccttg | catctcacag  | 2340 |

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|---|------|
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| tcattttatca tatatatata tacatgcata cactctcaaa gcaataaatt ttctacttca  | 2460 |
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| tatcaataaa tagaccatta atcag   | 2545 |

<210> 28

<211> 1144

<212> DNA

<213> NM\_005859.2| Homo sapiens purine-rich element binding protein A (PURA), mRNA

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|--|------|
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| tggcggaacc agacagcggc agcgcagcagg gtggtgcggc gctgggttcg ggcggctccc | 120  |
| tggggcacc cggctcgggc tcaggctccg ggcggggcgg tggtagcggc gggggcggcg   | 180  |
| gcggcagtg ggcgggcggc ggcggggccc caggggggct gcagcacgag acgcaggagc   | 240  |
| tggcctccaa ggcgggtgag atccagaaca agcgcttcta cctggacgtg aagcagaacg  | 300  |
| ccaagggccg ctctctgaag atgcgcgagg tgggcgcggg cggcaacaag agccgcctta  | 360  |
| ctctctccat gtacgtggcc gtggagttcc gcgactacct gggcgacttc atcgagcact  | 420  |
| acgcgcagct gggccccagc cagccgcggc acctggccca ggcgcaggac gagccgcgcc  | 480  |
| gggcgctcaa aagcgagtto ctggtgcgcg agaaccgcaa gtactacatg gatctcaagg  | 540  |
| agaaccagcg cggcgcgttc ctgcgcaccc gccagacggt caaccggggg cctggcctgg  | 600  |
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| gcacctcctt gactgtggac aacaagcgct tcttcttcga tgtgggtccc aacaagtacg  | 780  |
| gcgtgtttat gcgagtgagc gaggtgaagc ccacctatcg caactccatc accgtgcctt  | 840  |
| acaaggtgtg ggccaagtto ggacacacct tctgcaagta ctcgaggagg atgaagaaga  | 900  |
| ttcaagagaa gcagaggagg aagcgggctg cctgtgagca gcttcaccag cagcaacagc  | 960  |
| agcagcagga ggagaccgcc gctgccaccc tgctactgca ggtgaggaaa gaaggggaag  | 1020 |
| aagattgata aaactgaatg aaaccccccac acacacacac atgcatacac acacacacac | 1080 |

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<210> 29

<211> 1575

<212> DNA

<213> NM\_014298.3| Homo sapiens quinolinate phosphoribosyltransferase (nicotinate-nucleotide pyrophosphorylase (carboxylating)) (QPRT), mRNA

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| ggacagccgg gcacgatggc tcacacctgt aatcccagca ctttgggagg ctgaggcggg | 1320 |
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| ggaggctgag gcaggagaat cgcttgaacc caggaagtgg aggttgctg gactgatgg   | 1500 |
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| aaaaaaaaaa aaaaaa   | 1575 |

<210> 30

<211> 768

<212> DNA

<213> NM\_004585.2| Homo sapiens retinoic acid receptor responder (tazarotene induced) 3 (RARRES3), mRNA

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| ctatgagcac tgggccctgt atataggaga tggctacgtg atccatctgg ctctccaaag | 180 |
| tgagtacccc ggggctggct cctccagtgt cttctcagtc ctgagcaaca gtgcagaggt | 240 |
| gaaacggggg cgcttggaag atgtggtggg aggctgttc tatcgggtca acaacagctt  | 300 |
| ggaccatgag taccaaacac ggcccgtgga ggtgatcatc agttctcgca aggagatggt | 360 |
| tggtcagaag atgaagtaca gtattgtgag caggaaactgt gaggactttg tcgccagct | 420 |
| gagatatggc aagtccgctg gtaaacaggt ggaaaaggcc aaggttgaag tcggtgtggc | 480 |
| cacggcgctt ggaatcctgg ttgttctgtg atgctctttt gcgattagga gataccaaaa | 540 |
| aaaagcaaca gcctgaagca gccacaaaat cctgtgttag aagcagctgt ggggttccca | 600 |
| gtggagatga gcctccccc tgcctccagc agcctgaccc tcgtgccctg tctcaggcgt  | 660 |
| tctctagatc ctttctctgt ttctcctctc tcgtgggcaa aagtatgac taattgaaac  | 720 |
| aagactgaag gatcaataaa cagccatctg ccccttcaaa aaaaaaaaa             | 768 |

<210> 31

<211> 696

<212> DNA

<213> NM\_002984.1| Homo sapiens chemokine (C-C motif) ligand 4 (CCL4), mRNA

```
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ccaatgggct cagaccctcc caccgcctgc tgcctttctt acaccgcgag gaagcttctt      240
cgcaactttg tggtagatta ctatgagacc agcagcctct gctcccagcc agctgtggta      300
ttccaaaaca aaagaagcaa gcaagtctgt gctgatccca gtgaatcctg ggtccaggag      360
tacgtgtatg acctggaact gaactgagct gtcagagac aggaagtctt cagggaaggt      420
caactgagcc cggatgcttc tccatgagac acatctcttc catactcagg actctctctc      480
gcagttctctg tccctctct taatttaate ttttttatgt gccgtgttat tgtattaggt      540
gtcatttcca ttatttatat tagtttagcc aaaggataag tgcctatgg ggatgggtcca      600
ctgtcaactgt ttctctctg ttgcaaatac atggataaca catttgattc tgtgtgtttt      660
ccataataaa actttaaaat aaaatgcaga cagtta                                696
```

<210> 32

<211> 3338

<212> DNA

<213> NM\_001455.2| Homo sapiens forkhead box O3A (FOXO3A), transcript variant 1, mRNA

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<400> 32
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tgcgccaggt tcgtggcgc cactcttcca ggtcctcctg ttctgggag gcgggcgcgg      120
caggactggg aggtggcggc agcgggcgag gactcgccga ggacggggct ccggcccggg      180
ataaccaact ctctctctct ctctcttggg gcttccccag gcgggcgcgg cggegcgcgg      240
gagccggagc ctctcgcgcg tccacgtccc tccccctgct caccgccccc cggegcgcgaga      300
ggagagcgcg agagccccag ccgcgggcgg gcgggcggcg aagatggcag aggcaccggc      360
```

|            |             |             |            |             |             |      |
|------------|-------------|-------------|------------|-------------|-------------|------|
| tccccggcc  | ccgtctctctc | cgctcgaagt  | ggagctggac | ccggagtctg  | agccccagag  | 420  |
| ccgtccgcga | tctgttacgt  | ggcccccgca  | aaggccggag | ctccaagcga  | gcctgccaa   | 480  |
| gccctcgggg | gagacggccg  | ccgactccat  | gatccccgag | gaggaggacg  | atgaagacga  | 540  |
| cgaggacggc | gggggacggg  | ccggctcggc  | catggcgatc | ggcggcggcg  | gcgggagcgg  | 600  |
| cacgctgggc | tcggggtctg  | tccttgagga  | ctcgcccgcg | gtgctggcac  | ccggagggca  | 660  |
| agacccccgg | tctgggccaag | ccaccggcgg  | gggggggctg | agcgggggta  | cacaggcgct  | 720  |
| gctgcagcct | cagcaaccgc  | tgccaccgcg  | gcagccgggg | gcggctgggg  | gctccgggca  | 780  |
| gccgaggaaa | tggtctgtcg  | ggcggaacgc  | ctggggaaac | ctgtctctacg | cggacctgat  | 840  |
| cacccgcgcc | atcgagagct  | ccccggacaa  | acgggtcact | ctgtcccaga  | tctacgagtg  | 900  |
| gatggtgcgt | tgctgtccct  | acttcaagga  | taagggcgac | agcaacagct  | ctgccggctg  | 960  |
| gaagaactcc | atccgcgaca  | acctgtcact  | gcatagtcga | ttcatgcggg  | tcagaatga   | 1020 |
| gggaaactgg | aagagctctt  | ggtggatcat  | caacctgat  | ggggggaaga  | gcggaaaagc  | 1080 |
| cccccgcgcg | cgggctgtct  | ccatggacaa  | tagcaacaag | tataccaaga  | gcctggcgcg  | 1140 |
| cgcagccaag | aagaaggcag  | ccctgcagac  | agccccgaa  | tcagctgacg  | acagtccttc  | 1200 |
| ccagctctcc | aagtggcctg  | gcagcccccac | gtcacgcagc | agtgatgagc  | tggtatgcgtg | 1260 |
| gacggacttc | cgttcacgca  | ccaattctaa  | cgccagcaca | gtcagtgccc  | gctgtgcgcc  | 1320 |
| catcatggca | agcacagagt  | tggatgaagt  | ccaggacgat | gatgcgcctc  | tctcgcccat  | 1380 |
| gctctacagc | agctcagcca  | gctgtcaccc  | ttcagtaagc | aagccgtgca  | cggtggaact  | 1440 |
| gccacggctg | actgatattg  | caggcaccat  | gaatctgaat | gatgggctga  | ctgaaaacct  | 1500 |
| catggacgac | ctgctggata  | acatcacgct  | cccgccatcc | cagccatcgc  | ccactggggg  | 1560 |
| actcatgcag | cggaagctct  | gcttcccgta  | taccaccaag | ggctcgggcc  | tgggctcccc  | 1620 |
| aaccagctcc | tttaacagca  | cggtgttcgg  | accttcatct | ctgaactccc  | tacgccagtc  | 1680 |
| ttccatgcag | accatccaag  | agaacaagcc  | agctaccttc | tcttccatgt  | cacactatgg  | 1740 |
| taaccagaca | ctccaggacc  | tgctcacttc  | ggactcactt | agccacagcg  | atgtcatgat  | 1800 |
| gacacagtcg | gaccccttga  | tgtctcaggc  | cagcacgcgt | gtgtctgccc  | agaattcccg  | 1860 |
| ccggaaactg | atgcttcgca  | atgatccgat  | gatgtccttt | gctgcccagc  | ctaaccaggg  | 1920 |
| aagtttggtc | aatcagaact  | tgctccacca  | ccagcaccaa | accagggcgg  | ctcttggtgg  | 1980 |
| cagccgtgcc | ttgtcgaatt  | ctgtcagcaa  | catgggcttg | agtgagtcca  | gcagccttgg  | 2040 |

gtcagccaaa caccagcagc agtctcctgt cagccagtct atgcaaaccc tctcggactc 2100  
 tctctcaggc tctcctctgt actcaactag tgcaaacctg cccgtcattg gccatgagaa 2160  
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 cattatccgt agtgaactca tggatgctga tgggttggat tttaaacttg attecctcat 2280  
 ctccacacag aatgttgttg gtttgaactg ggggaacttc actggtgcta agcaggcctc 2340  
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 agcagagact gttaatggcc ccttacctg ggtgaagcac ttaccttgg aacagaactc 2580  
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 ttaaccgtcc ttcctctaga aaatttataa acagaaagaa aatgtgtgac cagttaccat 2880  
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 taaactaaag ggggattttc tttctctttt tgtttgtag aaaattatcc ttttctaaaa 3000  
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 caaaaggagt ggagcacagc gtcgggcccc gtgtgtttcc ggtctgagt cagggtgac 3120  
 tgtggacggg accccagcac caagtctacg ggtgccagat cagtagggcc tgtgatttcc 3180  
 tgtcagtgtc ctacgtaat gtgaacagtg ttggtctgct ggtagaacc tagaatattg 3240  
 atattttcag gaaagaaatc agctcagctc tccactcatt gccaaatgtc actaaagggt 3300  
 ttagttttta ggagaaagaa aaggaaaaaa aaaaaaaa 3338

<210> 33

<211> 2646

<212> DNA

<213> NM\_152873.1| Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 4, mRNA

<400> 33

|            |            |             |             |            |            |      |
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| cctaccgcg  | cgagggccaa | gttgetgaat  | caatggagcc  | ctccccaacc | cgggcggttc | 60   |
| ccagcgaggc | tctcttccca | tctctctgac  | caccggggct  | ttctgtgagc | tctctcttga | 120  |
| tctcgcgcaa | gagtgacaca | caggtgttca  | aagacgcttc  | tggggagtga | gggaagcggt | 180  |
| ttacgagtga | cttggttgga | gcctcagggg  | cgggcactgg  | cacggaacac | accctgaggg | 240  |
| cagccctggc | tgccagggc  | gagctgcctc  | ttctcccgcg  | ggttggtgga | cccgctcagt | 300  |
| acggagttag | ggaagctctt | tcacttcgga  | ggattgtctc  | acaaccatgc | tgggcactcg | 360  |
| gacccctcta | cctctggttc | ttacgtctgt  | tgctagatta  | tctccaaaa  | gtgttaatgc | 420  |
| ccaagtgact | gacatcaact | ccaagggatt  | ggaattgagg  | aagactgtta | ctacagttga | 480  |
| gactcagaac | ttggaaggcc | tgcatcatga  | tggccaatcc  | tgccataaag | cctgtctctc | 540  |
| aggtgaaagg | aaagctaggg | actgcacagt  | caatggggat  | gaaccagact | gcgtgccctg | 600  |
| ccaagaaggg | aaggagtaca | cagacaaaag  | ccatttttct  | tccaaatgca | gaagatgtag | 660  |
| attgtgtgat | gaaggacatg | atgtgaacat  | ggaatcatca  | aggaatgcac | actcaccagc | 720  |
| aacaccaagt | gcaaagagga | aggatccaga  | tctaacttgg  | ggtggcttgg | tcttcttctt | 780  |
| ttgccaatcc | cactaattgt | ttgggtgaag  | agaaaggaag  | tacagaaaaa | atgcagaaag | 840  |
| cacagaaagg | aaaaccaagg | ttctcatgaa  | tctccaacct  | taaatcctga | aacagtggca | 900  |
| ataaatttat | ctgatgttga | cttgagttaa  | tatatcacca  | ctattgctgg | agtcatgaca | 960  |
| ctaagtcaag | ttaaaggctt | tggttcgaaag | aatgggtgtc  | atgaagccaa | aatagatgag | 1020 |
| atcaagaatg | acaatgtcca | agacacagca  | gaacagaaag  | ttcaactgct | tcgtaattgg | 1080 |
| catcaacttc | atggaaagaa | agaagcgtat  | gacacattga  | ttaaagatct | caaaaaagcc | 1140 |
| aatctttgta | ctcttcgaga | gaaaattcag  | actatcatcc  | tcaaggacat | tactagtgtc | 1200 |
| tcagaaaatt | caaatctcag | aaatgaaatc  | caaagcttgg  | tctagagtga | aaaacaacaa | 1260 |
| attcagttct | gagtatatgc | aattagtggt  | tgaaaagatt  | cttaaatgct | ggctgtaaat | 1320 |
| actgcttggg | tttttactgg | gtacatttta  | tcattttatta | gcgtgaaga  | gccaacatat | 1380 |
| ttgtagattt | ttaatatctc | atgattctgc  | ctccaaggat  | gtttaaaatc | tagttgggaa | 1440 |
| aacaaaactc | atcaagagta | aatgcagtgg  | catgctaagt  | acccaaatag | gagtgtatgc | 1500 |
| agaggatgaa | agattaagat | tatgctctgg  | catctaacat  | atgattctgt | agtatgaatg | 1560 |
| taatcagttg | atgttagtac | aaatgtctat  | ccacaggcta  | acccactctc | atgaatcaat | 1620 |
| agaagaagct | atgacctttt | gctgaaatat  | cagttactga  | acaggcaggg | cactttgcct | 1680 |
| ctaaattacc | totgataatt | ctagagattt  | taccatattt  | ctaaactttg | tttataactc | 1740 |



|  |      |
|--|------|
| tgagaagatc atatttatgt aaagtatatg tatttgagtg cagaatttaa ataaggtctc  | 1800 |
| acctcaaaga cctttgcaca gtttattggg gtcattattat acaatatctc aattgtgaat | 1860 |
| tcacatagaa aacattaaat tataatgttt gactattata tatgtgtatg cttttactg   | 1920 |
| gctcaaaact acctacttct ttctcaggca tcaaaagcat ttgagcagg agagtattac   | 1980 |
| tagagctttg ccacctctcc atttttgcc tgggtgctcat cttaatggcc taatgcaccc  | 2040 |
| ccaaacatgg aaatatcacc aaaaaatact taatagtcca ccaaaaggca agactgccct  | 2100 |
| tagaaattct agcctggttt ggagatacta actgctctca gagaaagtag ctttgtgaca  | 2160 |
| tgtcatgaac ccatgtttgc aatcaaagat gataaaatag attcttattt tccccacc    | 2220 |
| cccgaaaatg ttcaataatg tcccatgtaa aacctgctac aaatggcagc ttatacatg   | 2280 |
| caatggtaaa atcatcatct ggatttagga attgctcttg tcatacccc aagtttctaa   | 2340 |
| gatttaagat tctccttact actatctac gtttaaatat ctttgaaagt ttgtattaaa   | 2400 |
| tgtgaatttt aagaataat atttatattt ctgtaaatgt aaactgtgaa gatagtata    | 2460 |
| aactgaagca gatactgga accacctaaa gaacttccat ttatggagga ttttttgcc    | 2520 |
| ccttgtgttt ggaattataa aatataggta aaagtacgta attaaataat gtttttgga   | 2580 |
| aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   | 2640 |
| aaaaaa   | 2646 |

<210> 34

<211> 817

<212> DNA

<213> NM\_002038.2| Homo sapiens interferon, alpha-inducible protein (clone IFI-6-16) (GIP3), transcript variant 1, mRNA

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| <400> 34   |     |
| gaaccgttta ctcgctgctg tgcccactca tcagcaggct ccgggctgaa gattgcttct  | 60  |
| cttctctcct ccaaggtcta gtgacggagc ccgcgcgcgg cgccaccatg cggcagaagg  | 120 |
| cggtatcgct tttcttgctg tacctgctgc tcttcaactg cagtgggggtg gaggcaggta | 180 |
| agaaaaagtg ctcggagagc tcggacagcg gctccgggtt ctggaaggcc ctgaccttca  | 240 |
| tggccgtcgg aggaggactc gcagtcgcgc ggctgcccgc gctgggcttc accggcgcgc  | 300 |
| gcatcgcggc caactcgggt gctgcctcgc tgatgagctg gctcgcgac ctgaatgggg   | 360 |

|             |             |            |            |             |            |     |
|-------------|-------------|------------|------------|-------------|------------|-----|
| gcgcggctgcc | cgccggggggg | ctagtggcca | cgctgcagag | cctcgggggct | ggtggcagca | 420 |
| gcgtcgctcat | aggtaatat   | ggtgccctga | tgggctacgc | caccacaag   | tatctcgata | 480 |
| gtgaggagga  | tgaggagtag  | ccagcagctc | ccagaacctc | ttcttcttc   | ttggcctaac | 540 |
| tcttcacgtt  | aggatctaga  | actttgcctt | tttttttttt | tttttttttt  | tttgagatgg | 600 |
| gttctcacta  | tattgtccag  | gctagatgtc | agtggctatt | cacagatgcg  | aacatagtac | 660 |
| actgcagcct  | ccaaactcta  | gctcaagtg  | atctctctgt | ctcaacctcc  | caagtaggat | 720 |
| tacaagcatg  | cgccgacgat  | gcccagaate | cagaactttg | tctatcactc  | tccccaacaa | 780 |
| cctagatgtg  | aaaacagaat  | aaacttcacc | cagaaaa    |             |            | 817 |

|       |    |  |     |
|-------|----|--|-----|
| <400> | 35 | gagacattcc tcaattgctt agacatatcc tgagcctaca gcagaggaac ctccagcttc  | 60  |
|       |    | agcaccatga atcaaaactgc gattctgatt tgcctgctta tctttctgac tctaagtggc | 120 |
|       |    | attcaaggag tacctctctc tagaaccgta cgctgtacct gcatacgat tagtaatcaa   | 180 |
|       |    | cctgttaate caaggctctt agaaaaactt gaaattattc ctgcaagcca attttgtcca  | 240 |
|       |    | cgtgttgaga tcattgtctac aatgaaaaag aagggtgaga agagatgtct gaatccagaa | 300 |
|       |    | tcgaaggcca tcaagaattt actgaaagca gttagcaagg aaatgtctaa aagatctcct  | 360 |
|       |    | taaaaccaga ggggagcaaa atcgatgcag tgcctccaag gatggaccac acagaggctg  | 420 |
|       |    | cctctcccat cacttcccta catggagtat atgtcaagcc ataattgttc ttagtttgca  | 480 |
|       |    | gttacactaa aaggtagcca atgatgtcca ccaaatacgc tgctactact cctgtaggaa  | 540 |
|       |    | ggttaatgtt catcatccta agctattcag taataactct accctggcac tataatgtaa  | 600 |
|       |    | gctctactga ggtgctatgt tcttagtgga tgttctgacc ctgcttcaaa tatttccctc  | 660 |
|       |    | acctttccca tcttccaagg gtactaagga atctttctgc ttgggggttt atcagaattc  | 720 |
|       |    | tcagaatctc aaataactaa aaggtagtga atcaaatctg ctttttaaaag aatgctcttt | 780 |
|       |    | acttcatgga ctccactgc catctctcca aggggcccaa attctttcag tqgctaccta   | 840 |

|  |      |
|--|------|
| catacaattc caaacacata caggaaggta gaaatatctg aaaatgtatg tgtaagtatt  | 900  |
| cttatttaat gaaagactgt acaaggtata agtcttagat gtatatattt cctatatattg | 960  |
| tttcagtgtg catggaataa catgtaatta agtactatgt atcaatgagt aacaggaaaa  | 1020 |
| ttttaaaaat acagatagat atatgctctg catgttacat aagataaatg tgctgaatgg  | 1080 |
| ttttcaaaa aaaatgagggt actctcctgg aaatattaaag aaagactatc taaatgttga | 1140 |
| aagatcaaaa ggttaataaa gtaattataa ct                                | 1172 |

<210> 36

<211> 396

<212> DNA

<213> NM\_005950.1| Homo sapiens metallothionein 1G (MT1G), mRNA

|  |     |
|--|-----|
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| cctcggttg caatggacc caactgctcc tgtgccgtg gtgtctcctg cacctgcgcc     | 120 |
| agctcctgca agtgcaaaaga gtgcaaatgc acctcctgca agaagagctg ctgctcctgc | 180 |
| tgccctgtgg gctgtgccaa gtgtgcccaa ggctgcatct gcaaaggggc atcgagagaag | 240 |
| tgcagctgct ggcctgatg tcgggacagc cctgctccca agtacaata gagtgaccg     | 300 |
| taaaatctag gattttttgt tttttgctac aatcttgacc cctttgctac attccctttt  | 360 |
| ttctgtgaaa tatgtgaata ataattaaac acttag                            | 396 |

<210> 37

<211> 2755

<212> DNA

<213> NM\_000043.3| Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 1, mRNA

|  |     |
|--|-----|
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| ccagcgaggc ttctctccca tctctctgac caccggggct ttcctgagc tcgtctctga | 120 |
| tctcgcgcaa gagtgcaca cagggtttca aagacgcttc tggggagtga gggaagcggt | 180 |

|             |            |            |            |            |             |      |
|-------------|------------|------------|------------|------------|-------------|------|
| ttacgagtga  | cttggctgga | gcctcagggg | cgggcactgg | cacggaacac | accctgaggg  | 240  |
| cagccctggc  | tgcccaggcg | gagctgcctc | ttctcccgcg | ggttgggtga | cccgctcagt  | 300  |
| acggagttgg  | ggaagctctt | teacttcgga | ggattgctca | acaacctatg | tgggcatctg  | 360  |
| gacctctcta  | cctctggttc | ttactgtctg | tgctagatta | tcgtccaaaa | gtgttaatgc  | 420  |
| ccaagtgact  | gacatcaact | ccaagggatt | ggaattgagg | aagaactgta | ctacagttga  | 480  |
| gactcagaac  | ttggaaggcc | tgcatcatga | tggccaatto | tgccataagc | cctgtcctcc  | 540  |
| aggtgaaagg  | aaagctaggg | actgcacagt | caatggggat | gaaccagact | gcgtgccctg  | 600  |
| ccaagaaggg  | aaggagtaca | cagacaaaag | ccatttttct | tccaaatgca | gaagatgtag  | 660  |
| attgtgtgat  | gaaggacatg | gcttagaagt | ggaaataaac | tgcccccgga | cccagaatac  | 720  |
| caagtgcaga  | tgtaaaccaa | actttttttg | taactctact | gtatgtgaac | actgtgaccc  | 780  |
| ttgcacaaaa  | tgtgaacatg | gaatcatcaa | ggaatgcaca | ctcaccagca | acaccaagtg  | 840  |
| caaagaggaa  | ggatccagat | ctaacttggg | gtggctttgt | cttctctctt | tgccaattcc  | 900  |
| actaatgtt   | tgggtgaaga | gaaagggaat | acagaaaaac | tgcagaaagc | acagaaagga  | 960  |
| aaaccaaggt  | totcatgaat | ctccaacctt | aaatcctgaa | acagtggcaa | taaattttatc | 1020 |
| tgatgttgac  | ttgagtaaat | atatcaccac | tattgctgga | gtcatgacac | taagtcaagt  | 1080 |
| taaaggcttt  | gttcgaaga  | atggtgtcaa | tgaagccaaa | atagatgaga | tcaagaatga  | 1140 |
| caatgtccaa  | gacacagcag | aacagaaagt | tcaactgctt | cgtaatgtgg | atcaaacttoa | 1200 |
| tggaaagaaa  | gaagcgtatg | acacattgat | taaagatctc | aaaaaagcca | atctttgtac  | 1260 |
| tcttcgagag  | aaaattcaga | ctatcatcct | caaggacatt | actagtgaat | cagaaaaattc | 1320 |
| aaacttcaga  | aatgaaatcc | aaagcttggg | ctagagtga  | aaacaacaaa | ttcagttctg  | 1380 |
| agtatatgca  | attagtgttt | gaaaagattc | ttaatagctg | gctgtaataa | ctgcttgggt  | 1440 |
| ttttaactggg | tacattttat | cattttattg | cgctgaagag | ccaacatatt | tgtagatttt  | 1500 |
| taatatctca  | tgattctgco | tccaaggatg | tttaaaatct | agttgggaaa | acaaacttca  | 1560 |
| tcaagagtaa  | atgcagtggc | atgctaagta | cccaaatagg | agtgtatgca | gaggatgaaa  | 1620 |
| gattaagatt  | atgctctggc | atctaacata | tgattctgta | gtatgaatgt | aatcagtgtg  | 1680 |
| tgtagtagta  | aatgtctatc | cacaggotaa | ccccactcta | tgaatcaata | gaagaagcta  | 1740 |
| tgaccttttg  | ctgaaatata | agttactgaa | caggcaggcc | actttgcctc | taaattacct  | 1800 |
| ctgataatto  | tagagatttt | accatatctc | taaactttgt | ttataactct | gagaagatca  | 1860 |

|            |            |            |             |             |            |      |
|------------|------------|------------|-------------|-------------|------------|------|
| tatttatgta | aagtatatgt | atttgagtgc | agaattttaa  | taaggctcta  | cctcaaagac | 1920 |
| ctttgcacag | tttattggtg | tcatattata | caatattttca | atttgtgaatt | cacatagaaa | 1980 |
| acattaaatt | ataatgtttg | actattatat | atgtgtatgc  | attttactgg  | ctcaaaacta | 2040 |
| cctacttctt | tctcaggcat | caaaagcatt | ttgagcagga  | gagtattact  | agagctttgc | 2100 |
| cacctctcca | tttttgcctt | ggtgctcctc | ttaatggcct  | aatgcacccc  | caaacatgga | 2160 |
| aatatcacca | aaaaatactt | aatagtccac | caaaaggcaa  | gactgccctt  | agaaattcta | 2220 |
| gctcggtttg | gagatactaa | ctgctctcag | agaaagtagc  | tttgtgacat  | gtcatgaacc | 2280 |
| catgttttgc | atcaaagatg | ataaaataga | ttcttatttt  | tccccacccc  | ccgaaaatgt | 2340 |
| tcaataatgt | cccatgtaaa | acctgctaca | aatggcagct  | tatacatagc  | aatggtaaaa | 2400 |
| tcatcatctg | gatttaggaa | ttgctcttgt | cataccccca  | agtttctaag  | atttaagatt | 2460 |
| ctccttacta | ctatcctacg | tttaaatatc | tttgaaagtt  | tgtattaaat  | gtgaatttta | 2520 |
| agaaataata | tttatatttc | tgtaaatgta | aactgtgaag  | atagttataa  | actgaagcag | 2580 |
| atacctggaa | ccacctaaag | aacttccatt | tatggaggat  | ttttttgccc  | cttgtgtttg | 2640 |
| gaattataaa | atataggtaa | aagtacgtaa | ttaataaatg  | tttttggtaa  | aaaaaaaaaa | 2700 |
| aaaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa  | aaaaaaaaaa  | aaaaa      | 2755 |

<210> 38

<211> 1600

<212> DNA

<213> NM\_001953.2| Homo sapiens endothelial cell growth factor 1 (platelet-derived) (ECGF1), mRNA

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| <400> 38    |            |            |            |            |            |     |
| gccccgccgc  | cggcagtgga | ccgctgtgcg | cgaacctga  | acctacggt  | ccgacccgc  | 60  |
| ggcgagggcc  | gggtacctgg | gctgggatcc | ggagcaagcg | ggcgagggca | gcgccctaag | 120 |
| caggcccgga  | gcgatggcag | ccttgatgac | cccggaacc  | ggggccccc  | ccgcgcctgg | 180 |
| tgactttctc  | ggggaaggga | gccagggact | tcccgaacct | tcgccagagc | ccaagcagct | 240 |
| cccggaagctg | atccgcgatg | agcgagacgg | aggccgcctg | agcgaagcgg | acatcagggg | 300 |
| cttcgtggcc  | gctgtggtga | atgggagcgc | gcagggcgca | cagatcgggg | ccatgctgat | 360 |
| ggccatccga  | cttcggggga | tggatctgga | ggagacctcg | gtgctgacct | aggccctggc | 420 |

|  |      |
|--|------|
| tcagtcggga cagcagctgg agtggccaga ggccctggcg cagcagcttg tggacaagca  | 480  |
| ttccacaggg ggtatgggtg acaaggtcag cctggtectc gcacctgcc tggcggtatg   | 540  |
| tggctgcaag gtgccaatga tcagcggacg tggctctggg cacacaggag gcaccttgga  | 600  |
| taagctggag tctattctcg gattcaatgt catccagagc ccagagcaga tgcaagtgtc  | 660  |
| gctggaccag gcgggctgct gtatcgtggg tcagagttag cagctgggtc ctgctggacgg | 720  |
| aatcctatat gcagccagag atgtgacagc caccgtggac agcctgccac tcatcacagc  | 780  |
| ctccattctc agtaagaaaa tcgtggaggg gctgtccgct ctgggtgggt acgttaagtt  | 840  |
| cggagggggc gccgtcttcc ccaaccagga gcaggcccg gagctggcaa agacgtggt    | 900  |
| tggcgtggga gccagcctag ggcttcgggt cgcggcagcg ctgaccgcca tggacaagcc  | 960  |
| cctgggtcgc tgcgtgggccc acgcccctga ggtggaggag gcgctgctct gcatggaagg | 1020 |
| cgcaggcccg ccagacttaa gggacctggg caccacgctc gggggcgccc tgccttggtc  | 1080 |
| cagcggacac gcggggactc aggtctcagg cgctgcccgg gtggcccggg cgctggacga  | 1140 |
| cggctcggcc cttggccgct tcgagcggat gctggcgggc cagggcggtg atcccgtct   | 1200 |
| ggccccagcc ctgtgtctcg gaagtccccc agaaccgccg cagctgtctc ctgcgcgccg  | 1260 |
| ggagcaggag gagctgtctg cgcgcgcaga tggcacctg gagctggtcc gggcgctgcc   | 1320 |
| gctggcgctg gtgtgtcacg agctcggggc cgggcgcagc cgcgctgggg agccgctccg  | 1380 |
| cctgggggtg gggcagagag tctgtgttga cgtgggtcag aggtgtcgcc gtgggacccc  | 1440 |
| ctggctccgc gtgcaccggg accggccccc gctcagcggc ccgcagagcc gcgcctgca   | 1500 |
| ggaggcgctc gtactctccg accgcgcgcc attcgcgcgc cctcgcctct tcgcagagct  | 1560 |
| cgttctgcgc ccgcagcaat aaagctcctt tgccgcgaaa                        | 1600 |

<210> 39

<211> 931

<212> DNA

<213> NM\_005138.1| Homo sapiens SCO cytochrome oxidase deficient homolog 2 (yeast) (SCO2), nuclear gene encoding mitochondrial protein, mRNA

<400> 39

|   |     |
|---|-----|
| gcagagccca gggagctgga ggtcggcgct tctctctgtg cttggtccac tgacgcggcg | 60  |
| ccccgcgcgc aggagcatca gatccatgct gctgtgtgact cggagcccca cagcttgga | 120 |

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| caggctctct | cagctcaagc | ctccggctcct | ccctgggacc | ctgggaggcc | aggccctgca | 180 |
| tctgaggtcc | tggcttttgt | caaggcaggg  | ccctgcagag | acagggtggc | agggccagcc | 240 |
| ccagggccct | gggcttcgaa | cccggctgct  | gatcacaggc | ctgttcgggg | ctggactcgg | 300 |
| tggggcctgg | ctggccctga | gggctgagaa  | ggagaggctg | cagcagcaaa | agcgaacaga | 360 |
| agccctgcgc | caggcagctg | tgggccaggg  | cgacttcac  | ctgctggatc | acagaggccg | 420 |
| ggctcgtgc  | aaggctgact | tccggggcca  | gtgggtgctg | atgtactttg | gcttactca  | 480 |
| ctgccctgac | atctgccacg | acgagctgga  | gaagctgggt | caggtgggtc | ggcagctgga | 540 |
| agcagagcct | ggtttgctc  | cagtgcagcc  | tgtcttcac  | actgtggacc | ccgagcggga | 600 |
| cgacgttgaa | gccatggccc | gctacgtcca  | ggacttcac  | ccaagactgt | tgggtctgac | 660 |
| cggctccacc | aaacaggttg | cccaggctag  | tcacagttac | cgcgtgtact | acaatgccgg | 720 |
| ccccaaagat | gaggaccagg | actacatcgt  | ggaccactcc | attgccatct | acctgtcaa  | 780 |
| ccctgacggc | ctcttcacgg | attactacgg  | ccggagcaga | tccggtgagc | agatctcaga | 840 |
| cagtgtgcgg | cggcacatgg | cggctttccg  | cagtgtcctg | tcttgagcca | ctgcagctcg | 900 |
| ggcccatca  | ttaaacgggc | tgcgtttaaa  | a          |            |            | 931 |

<210> 40

<211> 1216

<212> DNA

<213> NM\_006419.1| Homo sapiens chemokine (C-X-C motif) ligand 13 (B-cell chemoattractant) (CXCL13), mRNA

|            |  |
|------------|--|
| <400> 40   |  |
| ttcggcactt | gggagaagat gtttgaaaaa actgactctg ctaatgagcc tggactcaga 60  |
| gctcaagtct | gaactctacc tccagacaga atgaagtcca tctcgacatc tctgcttctc 120 |
| atgctgctgg | tcagcagcct ctctccagtc caaggtgttc tggaggctca ttacacaagc 180 |
| ttgaggtgta | gatgtgtcca agagagctca gtctttatcc ctagacgctt cattgatcga 240 |
| attcaaattc | tgccccgtgg gaatggttgt ccaagaaaag aaatcatagt ctggaagaag 300 |
| aacaagtcaa | tgtgtgtgtg ggacctcaa gctgaatgga tacaaagaat gatggaagta 360  |
| ttgagaaaaa | gaagtctctc aactctacca gtccagtggt ttaagagaaa gattccctga 420 |
| tgtgatatt  | tccactaaga acacctgcat tcttccctta tcctgtctct ggattttagt 480 |

|  |      |
|--|------|
| tttgtgctta gttaaatctt ttccagggag aaagaacttc cccatacaaa taaggcatga  | 540  |
| ggactatgtg aaaaataacc ttgcaggagc tgatggggca aactcaagct tcttctactca | 600  |
| cagcaccta tatacacttg gagtttgcac tcttattcat cagggaggaa agtttctttg   | 660  |
| aaaatagtta ttcagttata agtaatacac gattattttg attatatact tgttgtttaa  | 720  |
| tgtttaaaat ttcttagaaa acaatggaat gagaatttaa gcctcaaatt tgaacatgtg  | 780  |
| gcttgaatta agaagaaaat tatggcatat attaaaagca ggcttctatg aaagactcaa  | 840  |
| aaagctgcct gggaggcaga tggaacttga gcctgtcaag aggc aaagga atccatgtag | 900  |
| tagatacct ctgcttaaaa actcactacg gaggagaatt aagtcctact tttaaagaat   | 960  |
| ttctttataa aatttactgt ctaagattaa tagcattcga agatccccag acttcataga  | 1020 |
| atactcaggg aaagcattta aagggtgatg tacacatgta tcctttcaca catttgcctt  | 1080 |
| gacaaacttc tttcactcac atctttttca ctgacttttt ttgtgggggc ggggccgggg  | 1140 |
| ggactctggt atctaattct ttaatgattc ctataaatct aatgacattc aataaagttg  | 1200 |
| agcaaacatt ttactt  | 1216 |

<210> 41

<211> 738

<212> DNA

<213> NM\_006433.2| Homo sapiens granulysin (GNLY), transcript variant NKG5, mRNA

|  |     |
|--|-----|
| <400> 41   |     |
| gtatctgttg taaaccagc gacacggggg agatgacata caaaaagggc aggacctgag   | 60  |
| aaagattaag ctgcaggctc cctgcccata aaacagggtg tgaaggcat ctacagggct   | 120 |
| gccccaccat ggctacctgg gccctcctgc tccttgacgc catgctcctg ggcaaccacg  | 180 |
| gtctggtctt ctctcgtctg agccctgagt actacgacct ggcaagagcc cacctgcgtg  | 240 |
| atgaggagaa atctcgcgcc tgcctggccc aggagggccc ccagggtgac ctgttgacca  | 300 |
| aaacacagga gctgggcccgt gactacagga cctgtctgac gatagtcгаа aaactgaaga | 360 |
| agatggtgga taagcccaco cagagaagtg ttccaatgc tgcgaccccg gtgtgtagga   | 420 |
| cggggaggtc acgatggcgc gacgtctgca gaaatttcat gaggaggtat cagtctagag  | 480 |
| ttaccacagg cctcgtggcc ggagaaaactg cccagcagat ctgtgaggac ctacaggtgt | 540 |



|  |     |
|--|-----|
| gtataccttc tacaggtccc ctctgagccc tctcaccttg tctctgtggaa gaagcacagg | 600 |
| ctctgtcct cagatcccg gaacctcagc aacctctgcc ggctctcgc tctctcgatc     | 660 |
| cagaatccac tctccagtct cctcccctg actccctctg ctgtcctccc ctctcacgag   | 720 |
| aataaagtgt caagcaag  | 738 |

<210> 42

<211> 1579

<212> DNA

<213> NM\_001767.2| Homo sapiens CD2 antigen (p50), sheep red blood cell receptor (CD2), mRNA

|   |      |
|---|------|
| <400> 42  |      |
| accaaccct aagatgagct tccatgtaa attttagcc agcttcttc tgattttcaa     | 60   |
| tgtttcttc aaaggtgcag tctccaaaga gattacgaat gccttgaaa cctggggtgc   | 120  |
| cttgggtcag gacatcaact tggacattcc tagttttcaa atgagtgatg atattgacga | 180  |
| tataaatgg gaaaaaactt cagacaagaa aaagattgca caattcagaa aagagaaaga  | 240  |
| gactttcaag gaaaaagata catataagct atttaaaat ggaactctga aaattaagca  | 300  |
| tctgaagacc gatgatcagg atatctacaa ggatcaata tatgatacaa aaggaaaaaa  | 360  |
| tgtgttgaa aaaatatattg atttgaagat tcaagagagg gtctcaaaa caaagatctc  | 420  |
| ctggacttgt atcaacacaa ccctgacctg tgaggtaatg aatggaactg accccgaatt | 480  |
| aaacctgtat caagatggga aacatctaaa actttctcag aggggtcatc cacacaagtg | 540  |
| gaccaccagc ctgagtgcga aattcaagtg cacagcaggg aacaaagtca gcaaggaatc | 600  |
| cagtgtcgag cctgtcagct gtccagagaa aggtctggac atctatctca tcattggcat | 660  |
| atgtggagga ggcagcctct tgatggtctt tgggcaactg ctcgttttct atatcaccaa | 720  |
| aaggaaaaaa cagaggagtc ggagaaatga tgaggagctg gagacaagag cccacagagt | 780  |
| agctactgaa gaaaggggcc ggaagcccca acaaattcca gcttcaacc ctcagaatcc  | 840  |
| agcaacttcc caacatctcc ctccaccacc tggtcactgt tccaggcac ctagtcatcg  | 900  |
| tccccgcct cctggacacc gtgttcagca ccagctcag aagaggctc ctgctccgtc    | 960  |
| gggcacacaa gttcaccagc agaaaggccc gccctcccc agacctcgag ttcagccaaa  | 1020 |
| acctcccat ggggcagcag aaaactcatt gtccccttcc tctaattaaa aaagatagaa  | 1080 |

|  |      |
|--|------|
| actgtctttt tcaataaaaa gcaactgtgga tttctgacct cctgatgtgc ataccgtac  | 1140 |
| ttccatgagg tgttttctgt gtgcagaaca ttgtcacctc ctgaggctgt gggccacagc  | 1200 |
| cacctctgca tottcgaact cagccatgtg gtcaacatct ggagtttttg gtctctctag  | 1260 |
| agagctccat cacaccagta aggagaagca atataagtgt gattgcaaga atggtagagg  | 1320 |
| accgagcaca gaaatcttag agattttctg tccccctctca ggctcatgtg agatgcgata | 1380 |
| aatcaagtga ttggtgtgco tgggtctcac tacaagcagc ctatctgctt aagagactct  | 1440 |
| ggagtttctt atgtgacctg gtggacaact gccaccacac ctgtgagtaa aagtgaata   | 1500 |
| aaagctttga ctagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  | 1560 |
| aaaaaaaaaa aaaaaaaaaa  | 1579 |

<210> 43

<211> 3738

<212> DNA

<213> NM\_006275.4| Homo sapiens splicing factor, arginine/serine-rich 6 (SFRS6), mRNA

|  |     |
|--|-----|
| <400> 43   |     |
| ctggcgcgcg cgcgcgccat tgtgtggctg gactcggcgc cccctgtggt gtgaggcgcg  | 60  |
| tgttcgggct cttgccgtcc ccgcacccgc accgcgggta ctggcttgcc gtccgcggtt  | 120 |
| cgacaaccag cccctgggtc cccgcccgcc accgacatgc cgcgcgtcta cataggacgc  | 180 |
| ctgagctaca acgtccggga gaaggacatc cagcgctttt tcagtggcta tggccgcctc  | 240 |
| ctcgaagtag acctcaaaaa tgggtacggc ttcgtggagt tcgaggactc ccgcgacgcc  | 300 |
| gacgacgccg ttacagagct gaacggcaag gagctctgcg gcgagcgcgt gatcgtagag  | 360 |
| cacgcccggg gcccgcgctg cgatcgcgac ggctacagct acggaagcgc cagtgggtga  | 420 |
| gggtgatata gcagtcggag aacatctggc agagacaaat accgaccacc tgttcgtaca  | 480 |
| gaatacagcg ttattgtaga aaatctttct agtcggtgca gttggcaaga tttaaaggat  | 540 |
| tttatcgac aagcaggtga agtaacctat gcggatgccc acaaggaacg acaaatgag    | 600 |
| gggtgaattg agtttcgctc ctactctgac atgaagcgtg ctttgacaa actggatggc   | 660 |
| acagaaataa atggcagaaa tattaggctt attgaagata agccacgcac aagccatagg  | 720 |
| cgatcttact ctggaagcag atccaggtct cgatctagaa gacggctcacg aagtaggagt | 780 |

|  |      |
|--|------|
| cgcaggagca gccgcagtag atctcgaagt atctcaaaaa gtgcgtcccg ttccaggctg  | 840  |
| cggagcaaaag gtgcgacacg ttctcgatca aaaggcagga aatctagatc aaagagcaaa | 900  |
| tctaagccca agtctgagcg gggctcccat tcacattctc gaagcagatc taaggatgag  | 960  |
| tatgagaaat ctccaagcag gtctcggtcc cgatccccc aagaaaatgg aaaggggtgat  | 1020 |
| ataaagtc aaatccagatc aaggagccag tcccgttcca attcgccgct acctgttcca   | 1080 |
| ccctcaagg ccggttctgt gtccctcca ccaaaaagag ctacttcaag atcccgttct    | 1140 |
| agatctcgct caaagtc aag atcaaggctc aggtcgagtt ccagagatta actcagaact | 1200 |
| ccttgtttgc acattattat ggaacacttt cctacttagg cagttactct tccatgttta  | 1260 |
| tacttgccct ctctgcag aggaatctct tgaaaacagg ggcacacaga aatttgattt    | 1320 |
| gtggccaaat tggatgaaaa agatgaggct ctaaggaaat ggtggcatga agaccctctc  | 1380 |
| cctctttgt agaattaaga taactttgat ttatagctt ttgagctaac gtaacttttg    | 1440 |
| taaagattaa gctcatttag tgtgttttt ttttttttt ttttttttt ttttttagtat    | 1500 |
| ttcagcagga tctgctggca gggtttttt gttttatttg ttgtctatt tttaaattaa    | 1560 |
| ctgttttgag ctttgaatac ttaaggcttt agaggagaaa ccaattttc aattatgttg   | 1620 |
| gctttttata aagcttgagt tatgtaagt ttaataaaaa gtttgctacc aagatgattg   | 1680 |
| ccttattgaa taggtcacta ttaaatctc ttaaatgttg atatctgcaa ttgtggaaa    | 1740 |
| caacgtaaat tctacttaag tgtaaaacaag gcaagcctca gaccagcaat aaattactca | 1800 |
| gtttggataa cattattttg tgcagttaat caaattgccc aaagcttta tctgcccctt   | 1860 |
| taacaagttg agtaaaaaa aaaggtattt ttagtcaat gtgttccatg attttgctta    | 1920 |
| aattaatact ttaagtaat ggaactttt tcaaaggcaa atttaacta ttaagaaat      | 1980 |
| agtcctaact acttgggac ttgttttagg aatccacttt ctgggaagtc tcagcataat   | 2040 |
| tagtgttag agtgggtcag ttgtctttaa tgtttgtcat gtggaaatgg aagtgcctc    | 2100 |
| ttttgttct gaaattgagt ttattcaaa tgtaaaagca catactgcat tttctgctga    | 2160 |
| aagatcatta tgtttaacag gcaacttaac tcagttaaag cagttgccag ttaagttcca  | 2220 |
| cccagtagtc agtccccttt gtagttagtg ggattatttg ataattggtt agatcatact  | 2280 |
| tgtaaat ttaagctttgt gtaattggtt tgaaaacag tgaaatgggt aaacgcaaaa     | 2340 |
| ctttgtact ttattacgag taaagtgtaa tgagtactgt ggaaccacaa ttgtaatact   | 2400 |
| gcaaatttgt aggtgttact aggttagcaa ttagtccata catccataag cctgatgagt  | 2460 |
| tgaaattgca gtttgagaag tgaattaacc ttacatccct ttgttcagat accttaaaag  | 2520 |

|            |            |            |             |             |            |      |
|------------|------------|------------|-------------|-------------|------------|------|
| ttactttatt | taaaagcatt | tattaatctt | agtcgtgaaat | caaaatatag  | attaattggc | 2580 |
| tcagctttaa | tacctttcta | ggagggtgca | caatgtaggg  | taccaagggt  | tggtattgta | 2640 |
| tggggcatgg | tcgtacactg | ctcattgtgc | cacaggtgtg  | actgaaaagc  | atgatattct | 2700 |
| agggttggtt | tgtagattca | aataatccag | aaatatacct  | aataagattg  | agtgaaaaat | 2760 |
| ttgagtcaaa | tatctagggc | attcacagag | tagctgtgag  | ttcttggtta  | tgtgaaaaag | 2820 |
| gccttgtttt | tcagaaatcc | ctgggtttcc | tgttaaaaaa  | tcttaagacc  | caaccttagg | 2880 |
| aatatagtgc | cccaaaaggc | ggatgcttct | tccattatct  | tattttcttt  | gatactttat | 2940 |
| ttaattagat | gtttataaag | aaatgggttt | atttttccag  | cataaacctc  | agaatttaag | 3000 |
| gaaagaaaaa | gatgtctggt | gttatagttc | attgttttgc  | ctactcagca  | gaagtgatga | 3060 |
| ctcttaaaaa | ttggctttga | ccaaagtctc | ctgtttttca  | gggaaagaac  | ataaaagctt | 3120 |
| tttgaactac | agccttttta | aaagagggat | gggaggatat  | tacagtaaga  | aattaggctt | 3180 |
| tctaaaagta | tgaaacatcc | ttcaactggg | ctctcttggt  | aataggacat  | catatggtaa | 3240 |
| tagactgggt | tgactatatt | gttagctgcc | acagtaagca  | ggctattgta  | taggtaaatg | 3300 |
| cctgcaccca | taattttcta | gtaatagcca | cgaccaattt  | attaacagtc  | agggcctatc | 3360 |
| cttgctctga | gttctcagtc | actggatgca | caaaatcact  | gtgtaacatt  | ggctcacttg | 3420 |
| gtgagcatag | ggttgactga | taaaatgttt | aattcccttg  | ctagcttggtg | agaagaatga | 3480 |
| gttgatgaca | tgctccatac | cagtggctag | atggagtatt  | aagggtgagc  | agaaaagaag | 3540 |
| tgagaacatc | ttgatccccc | tttctttttc | ttgatgggtg  | ttatgaacat  | gccgtagtgc | 3600 |
| ctttatggcc | agtttgagtc | ctgcctactt | tgactttttc  | gttcccattc  | ctgtgttacc | 3660 |
| accttctctc | cgattttgtc | acctattttg | tgcttttaaa  | ctcaataaaa  | tacttactga | 3720 |
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<210> 44

<211> 2033

<212> DNA

<213> NM\_003212.1| Homo sapiens teratocarcinoma-derived growth factor 1 (TDGF1), mRNA

<400> 44

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|  |      |
|--|------|
| cctccagttt cccctggacg ccttgctect gcttctgcta cgacottctg gggaaaaacga | 120  |
| atttctcatt ttcttcttaa attgccattt tcgctttagg agatgaatgt tttcctttgg  | 180  |
| ctgttttggc aatgactctg aattaaagcg atgctaacgc ctcttttccc cctaattgtt  | 240  |
| aaaagctatg gactgcagga agatggcccg cttctcttac agtgtgattt ggatcatggc  | 300  |
| catttctaaa gtctttgaac tgggattagt tgcggggtg ggcocatagg aatttgctcg   | 360  |
| tccatctcgg ggatacctgg ccttcagaga tgacagcatt tggccccagg aggagcctgc  | 420  |
| aattcggcct cggctctccc agcgtgtgcc gcccatgggg atacagcaca gtaaggagct  | 480  |
| aaacagaacc tgctgcctga atgggggaac ctgcattgct gggctctttt gtgcctgccc  | 540  |
| tcctctcttc tacggacgga actgtgagca cgatgtgcgc aaagagaact gtgggtctgt  | 600  |
| gccccatgac acctggctgc ccaagaagtg ttccctgtgt aaatgctggc acggtcagct  | 660  |
| ccgctgcttt cctcaggcat ttctaccogg ctgtgatggc cttgtgatgt atgagcacct  | 720  |
| cgtggcttcc aggactccag aactaccacc gtctgcacgt actaccactt ttatgctagt  | 780  |
| tggcatctgc cttctatata aaagctaact ttaatcgaca ttgacctatt tcagaaaata  | 840  |
| caattttaga tatcatgcaa atttcatgac cagtaaaggc tgctgctaca atgtcctaac  | 900  |
| tgaagatga tcatttgtag ttgccttaaa ataataaata caatttccaa aatggctctc   | 960  |
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| tttttttttt ttgagacgga gtctcactct gtcacccagg ctggactgca atgacgcgat  | 1140 |
| cttggttcac tgcaacctcc gcctccgggg ttcaagccat tctcctgcct aagcctccca  | 1200 |
| agtaactggg attacaggca tgtgtcacca tgcccagcta atttttttgt atttttagtag | 1260 |
| agatgggggt ttaccatata tggccagtct ggtctcgaac tctgaccttg tgatccatcg  | 1320 |
| atcagcctct cgagtgtcta gattacacac gtgagcaact gtgcaaggcc tgggtgttct  | 1380 |
| tgatacatgt aattctacca aggtcttctt aatatgttct tttaaatgat tgaattatat  | 1440 |
| gttcagatta ttggagacta attctaatgt ggaccttaga atacagtttt gagtagagtt  | 1500 |
| gatcaaaatc aattaaaata gtctctttta aaggaaagaa aacatcttta aggggaggaa  | 1560 |
| ccagagtgtc gaaggaatgg aagtccatct gcgtgtgtgc agggagactg ggtaggaaaag | 1620 |
| aggaagcaaa tagaagagag aggttgaaaa acaaaatggg ttacttgatt ggtgattagg  | 1680 |
| tgggtgtaga gaagcaagta aaaaggctaa atggaagggc aagtttccat catctataga  | 1740 |

|  |      |
|--|------|
| aagctatata agacaagaac tccccctttt ttcccaaaagg cattataaaa agaatgaagc | 1800 |
| ctccttagaa aaaaaattat acctcaatgt ccccaacaag attgcttaat aaattgtgtt  | 1860 |
| ttctccaagc tattcaatto ttttaactgt tgtagaagac aaaatgttca caatatattt  | 1920 |
| agttgtaaac caagtgatca aactacatat tgtaaagccc atttttataa tacattgtat  | 1980 |
| atatgtgtat gcacagtaaa aatggaaact atattgacct aaaaaaaaaa aaa         | 2033 |

<210> 45

<211> 367

<212> DNA

<213> NM\_005951.1| Homo sapiens metallothionein 1H (MT1H), mRNA

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| gcgcctcgc cggtcctgc aagtgcataa agtgcaaatg cacctcctgc aagaagagct   | 120 |
| gctgctcctg ttgccccctg ggctgtgcc aagtgtgccca gggctgcac tgcaaagggg  | 180 |
| cgtcagagaa gtgcagctgc tgtgctgat gtcgggacag ccctgctgct agatgaaaac  | 240 |
| agaatgacac gtaaaatccg aggtttttt ttctacaac tccgactcat ttgctacatt   | 300 |
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| aaaaaaa   | 367 |

<210> 46

<211> 3052

<212> DNA

<213> NM\_000767.4| Homo sapiens cytochrome P450, family 2, subfamily B, polypeptide 6 (CYP2B6), mRNA

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|--|-----|
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| ccttttggga aacctctctc agatggatag aagaggccta ctcaaatcct ttctgaggtt  | 180 |
| ccgagagaaa tatggggagc tcttcacggt acacctggga ccgaggcccc tggctcatgct | 240 |

|  |      |
|--|------|
| gtgtggagta gaggccatac gggaggccct tgtggacaag gctgaggcct tctctggccg  | 300  |
| gggaaaaatc gccattggtc acccattctt ccggggatat ggtgtgatct ttgcaatgg   | 360  |
| aaaccgctgg aagggtgctt ggcgattctc tgtgaccact atgagggaact tggggaagg  | 420  |
| aaagcggagt gtggaggagc ggatgcagga ggaggctcag tgtctgatag aggagcttcg  | 480  |
| gaaatccaag ggggccctca tggacccccc ctctctcttc cagtccatta ccgccaacat  | 540  |
| catctgctcc atcgtctttg gaaaaacgatt ccaactacca gatcaagagt tcttgaagat | 600  |
| gctgaacttg ttctaccaga ctttttcaact catcagctct gtattcgccc agctgtttga | 660  |
| gctcttctct ggctctttga aatacttttc tggggcacac aggcgaagtt aaaaaacct   | 720  |
| gcaggaaatc aatgcttaca ttggccacag tgtggagaag caccgtgaaa ccttggaccc  | 780  |
| cagcgcctcc aaggacctca tcgacacctc cctgctccac atggaaaaag agaaatccaa  | 840  |
| cgcacacagt gaattcagcc accagaaact caacctcaac acgctctcgc tcttctttgc  | 900  |
| tggcactgag accaccagca ccaactctcc ctacggcttc ctgctcatgc tcaaataccc  | 960  |
| tcatgttgca gagagagtct acaggggagt tgaacagggt attggccccc atcgccctcc  | 1020 |
| agagcttcat gaccgagcca aaatgccata cacagaggca gtcattctat agattcagag  | 1080 |
| attttccgac cttctcccca tgggtgtgccc ccacattgtc acccaacaca ccagcttccg | 1140 |
| agggtacatc atccccaaag acacagaagt atttctcctc ctgagcactg ctctccatga  | 1200 |
| cccacactac tttgaaaaac cagacgcctt caatctgac cactttctgg atgcaatgg    | 1260 |
| ggcactgaaa aagactgaag ctttttatccc cttctcctta ggggaaggga tttgtcttgg | 1320 |
| tgaaggcatc gccctgctgg aattgttctc cttcttcacc accatctccc agaacttctc  | 1380 |
| catggccagc cccgtggccc cagaagacat cgatctgaca cccaggagt gtggtgtggg   | 1440 |
| caaaaataccc ccaacatacc agatccgctt cctgccccgc tgaaggggct gagggagggg | 1500 |
| gggtcaaagga ttccagggtc attcagtgtc cccgcctctg tagacaatgg ctctgactcc | 1560 |
| ccgcaacttc ctgcctctga gagacctgct acaagccagc ttcttcccc tccatggcac   | 1620 |
| cagttgtctg aggtcacatt gcaagtgagt gcaggagtga gattatcgaa aattataata  | 1680 |
| tacaaaatca tatatatata tatgttcttg ttttttgaga cagagtctca cactgttgcc  | 1740 |
| caggctggag tgcagtggtg tgatctoggc tcaactgcaac ctccaccccc ggggatcaag | 1800 |
| caactctctc gcctcagctt cctagtagc tgggattaca ggcagcact accacgcttg    | 1860 |
| gctaattttt gtatttttag tagagatggg gtttctactgt gtaggccagg ctggctctga | 1920 |
| actctgaac tcaagtgatt caccacacct agcctcccaa agtgcctggga ttacaggcgt  | 1980 |

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| gagtcaccgt gccacagccat gtatatatat aatttttaaaa attaagctga aattcacata | 2040 |
| acataaaaatt agctgtttta aagtgtaaaa tttagtggcg tgtgggttcac tcacaagct  | 2100 |
| gtacaaccac caccatctag ttccaaacat tttctttttt tctgagatgg agtctcactc   | 2160 |
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| ccaggttccc tgagctgtgg gattctgcac tgggtgcttg gattcctga tatgttccct    | 3000 |
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<210> 47

<211> 1645

<212> DNA

<213> NM\_003811.2| Homo sapiens tumor necrosis factor (ligand) superfamily, member 9 (TNFSF9), mRNA

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| tgtgtgtgct gctcgtgccc gctgcgcgcg tcttctctgc ctgcccctgg gccgtgtccg | 180 |
| gggtctgcgc ctgcgccgcg tccgcggcca gcccgagact ccgcgagggt cccgagcttt | 240 |



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| cgccccacga | tcccgccggc  | ctcttggacc  | tgcggcaggg  | catgtttgcg | cagctggtgg | 300  |
| cccaaatgt  | tctgctgac   | gatgggcccc  | tgagctggta  | cagtgaccca | ggcctggcag | 360  |
| gcgtgtccct | gacggggggc  | ctgagctaca  | aagaggacac  | gaaggagctg | gtggtggcca | 420  |
| aggctggagt | ctactatgct  | ttctttcaac  | tagagctgcg  | gcgcgtggtg | gcggcgaggg | 480  |
| gctcaggctc | cgtttcactt  | gcgctgcacc  | tgcagccact  | gcgctctgct | gctggggcgg | 540  |
| ccgcccctgg | tttgaccgtg  | gacctgcacc  | ccgcctctct  | cgaggctcgg | aaactggcct | 600  |
| tcggtttcca | ggggcgcttg  | ctgcacctga  | gtgccggcca  | gcgcctgggc | gtccatcttc | 660  |
| acactgaggc | cagggcacgc  | catgcctggc  | agcttaccca  | gggcgccaca | gtcttgggac | 720  |
| tcttcgggt  | gacccccgaa  | atcccagcgg  | gaactccctc  | accgaggtcg | gaataacgcc | 780  |
| cagcctgggt | gcagcccacc  | tggacagagt  | ccgaatccct  | ctccatcctt | catggagacc | 840  |
| cctggtgctg | ggctccctgt  | gctttctcta  | cctcaagggg  | cttgccaggg | gtccctgctg | 900  |
| ctgacctccc | cttgaggacc  | ctctccaccc  | actcctcccc  | caagttggac | cttgatattt | 960  |
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| tcttcgacat | tgcgagagct  | ggtcttgaa   | tcttggaact  | agacgacct  | cctgcctcag | 1140 |
| cctcccaagc | aaactgggatt | catcctttct  | attaattcat  | tgtactattt | tgccattttg | 1200 |
| tgtgtattga | gcactgtgaa  | tgtgccagca  | ttgtgccagc  | gctagggggg | tatagaaaca | 1260 |
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| acggtattgc | tatgttgcca  | aggttgttta  | catgccagta  | caatttataa | taaacactca | 1620 |
| ttttctctca | aaaaaaaaaa  | aaaaa       |             |            |            | 1645 |

<210> 48  
 <211> 6640  
 <212> DNA

<213> NM\_006047.4| Homo sapiens RNA binding motif protein 12 (RBM12), transcript variant 1, mRNA

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| ctggatattg  | tggaagatag | tatttatata | gcttatggac | ccaatgggaa  | agcaactggc | 1680 |
| gaaggctttg  | tagagttcag | aatgaggct  | gactataagg | ctgctctgtg  | tgcgcataaa | 1740 |
| cagtacatgg  | gcaatcgctt | tattcaagtt | catccaatta | ctaagaaaag  | tatgctagaa | 1800 |
| aagatagata  | tgattcgaaa | aagactgcag | aacttcagct | atgaccagag  | ggaatgata  | 1860 |
| ctaaatccag  | agggggatgt | caactctgcc | aaagtctgtg | cccacataac  | aaatattcca | 1920 |
| ttcagcatta  | caaagatgga | tgttcttcag | ttcctagaag | gaatcccagt  | ggatgaaaat | 1980 |
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| gattgttttc  | ctagtatttc | caggttagaa | cctgtggatt | gtttcaattg  | catatagctt | 3180 |
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<213> NM\_006644.2| Homo sapiens heat shock 105kDa/110kDa protein 1 (HSPH1), mRNA

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<211> 3349

<212> DNA

<213> NM\_004602.1| Homo sapiens staufer, RNA binding protein (Drosophila) (STAU), transcript variant T4, mRNA

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<211> 402

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<210> 52

<211> 3248

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| caagtagaaa tattagtgtt acggaagtgc ctaatatccc agtccaaatt tttttttttt  | 1860 |
| tttttttttt tttttgagac agagtcttgc tctgtcacc aggtcgagat gcagtggctg   | 1920 |
| gatcgctcac tgcaacctca gctcctgga ttttaagtgt tctcctgcct cagcctccca   | 1980 |
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| catgttggcc aggttggct tgaactcctg acctcaggtg atcctcctgc ctggcctcc    | 2460 |
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| ctattagaga | ggtacttttag | aggcttcttg | attggcataa | agttcctaag | gttatagatt | 3120 |
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<210> 53

<211> 3098

<212> DNA

<213> NM\_003671.2| Homo sapiens CDC14 cell division cycle 14 homolog B (S. cerevisiae) (CDC14B), transcript variant 1, mRNA

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| cggctgcggg | cacctggggg | cgggctgggg  |
| 180        |            |             |
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| agggctgcgg | cgcgggtcct | gcggcgggcg  |
| 240        |            |             |
| cgggaggcag | cggggcaggc | gctgtggggc  |
| gggtctctcc | tccggctctc | gcgcgaccgc  |
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| ccccgcagcg | cgcctctgcg | cccgcgcgcc  |
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| ccatgaagcg | gaaaagcgag | cggcggtcga  |
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| gctgctcgto | gaacctcgcg | ggtgtgaaga  |
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| gccgcgggga | ccccaggacg | gacgtgtacc  |
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| ttgaatatga | gaacttctac | gcagattttg  |
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| attgttgcaa | gatcaataag | aaattaaagt  |
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| attttactgg | ctctgatcag | agaaaacaag  |
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| tggttatata | tttggggaga | accccagaag  |
| 900        |            |             |
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| catcctatat | tcctttcaga | gatgtgcctc  |
| 960        |            |             |

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| tgcagtatgg ctctcctaata ttcaactcat ttaaccttga tgaatatgaa cactatgaaa  | 1080 |
| aagcagaaaa tggagattta aattggataa taccagaccg atttattgcc ttctgtggac   | 1140 |
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| aatatTTTTA gaatcacaat gttactacca ttattcgtct gaataaaaagg atgtatgatg  | 1260 |
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| gctcgggtgat tgggcctcag cagcagtttt tgggtgatgaa gcaaaccaac ctctggctgg | 1560 |
| aaggggacta tttctcgcag aagttaaagg ggagagagaa tggacaacac agagcagcct   | 1620 |
| tctccaaact tctctctggc gttgatgaca ttccataaa tggggctgag aatcaagatc    | 1680 |
| agcaagaacc cgaaccgtac agtgatgatg acgaaatcaa tggagtgaca caaggtgata   | 1740 |
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| caaaagcctt agttgtcttt tccacctaa agtttgatca atggagaaaa tgtccactgg    | 1980 |
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| ttattaacaa gaatctgtga aaatcacatt taaacactgt tgcattgttg aagaccaggt   | 2460 |
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| cttctccccc | agccctactg | gaacacagca  | gagtcgtgtc  | catgaagcag  | ttacagaaac | 2940 |
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| cctgcggggc | gccggtgaaa | taccaactact | ctgacgtgtt  | tttcaactgac | ccggtgaggc | 3060 |
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<210> 54

<211> 7850

<212> DNA

<213> XM\_372063.2| PREDICTED: Homo sapiens similar to epiplakin (LOC389697), mRNA

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| ctgectgctg | ggctcgggca | ggctctgcta gaggccagg cagccactgg gggcctggtg 180   |
| gacctcgccc | ggggccagct | gctccctgtg tccaaggccc tgcagcaggg tctggtgggg 240  |
| ctggagctga | aggagaagct | gctggccgct gagcgtgccca ctacgggcta tectgacccc 300 |
| tacggcggtg | agaagctggc | cctctttcag gccatcggga aggaggttgt ggacagggcc 360  |
| ctggggcaga | gctggctgga | ggtccaaact gccactgggg gcctggtgga ccccgcccag 420  |
| ggagtgtctg | tggcccttga | gccagcctgc caccagggcc tctggaccgg ggagacatgg 480  |
| cacaagctgt | cagagcttga | gcctggcaca ggtgacctgc gcttcctcga ccccaacacg 540  |
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| ctagccttgc | tgccccctca | gatcaccttc cgctccatgg gcggggcggt gactgcagct 660  |
| gagctgtctg | aggtgggcat | cctggacgag caggctgtgc agggctctcg ggagggcagg 720  |
| ctggcccgag | tggacgtgag | tgacacgtgc gagggtgggc gctacctgga gggtagccgc 780  |
| agcgtggccg | gggttgtcct | gctgcccga gcccacaaga agagcttttt ccaggctgcc 840   |
| accgagcacc | tgctcccaat | gggcacgcgc ctgcccactcc tagaggccca ggctgccacc 900 |

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| gccacgggag | gcatcatcga  | ccccgtgcac | agccaccgcg | tgcccttgga | cgtggcctac | 5040 |
| cgtgcggct  | acttcgacga  | ggagatgaac | cgcacctctg | cggaccccg  | cgacgacacc | 5100 |
| aagggtctct | tcgaccccaa  | cacgcacgag | aacctcacgt | acctgcagct | tctggagcgc | 5160 |
| tgtgtggagg | accccgagac  | gggcctgtac | ctgctacaaa | tcataaagaa | aggagaaaac | 5220 |
| tacgtgtaca | tcaatgaggc  | cacgagacac | gtgttgcaat | ccagaactgc | aaaaatgcgc | 5280 |
| gtggggagg  | ttgtcgacca  | ggtggtctct | ttctgggacc | tgctgtcctc | tcataacttc | 5340 |
| acagaggaca | ggaagcgga   | gctcatccag | gagtatggag | cccagagtgg | ggcctggag  | 5400 |
| aaattgtctg | aatcatcac   | cacgacaatt | gaagaaacag | agacgcaaaa | ccaaggcatc | 5460 |
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| ctctcagct  | cagccataat | cacggaggaa | atgctccagg | acctggaaac  | gggacggagc | 6540 |
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| ggctactctg | acgaggagat | gaaccgcgtc | ctggccgacc | ccagcgacga  | caccaagggc | 7080 |
| ttcttcgacc | ccaacacgca | cgagaacctc | acgtacctgc | agcttctgca  | gagggccacc | 7140 |
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<211> 454

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<210> 56

<211> 2090

<212> DNA

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 gtgcagcttc cctcgccgca cgggggcctc ccgcgcctc gccggcctcc aggccctcc 180  
 tggctggcga gcggggcgca catctggccc gcacatctgc gctgccggcc cggcgcgagg 240  
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| agaagtcggt | taataacgac | atgatagtca | ctgacaacaa  | cggtgcagtc | aagtttcac   | 480  |
| aactgtgtaa | attttgtgat | gtgagatttt | ccacctgtga  | caaccagaaa | tcctgcata   | 540  |
| gcaactgcag | catcacctcc | atctgtgaga | agccacagga  | agtctgtgtg | gctgtatgga  | 600  |
| gaaagaatga | cgagaacata | acactagaga | cagtttgcca  | tgaccccaag | ctcccctacc  | 660  |
| atgactttat | tctggaagat | gctgctttct | caaagtgcac  | tatgaaggaa | aaaaaaaaagc | 720  |
| ctggtgagac | tttcttcctg | tgttctctga | gctctgatga  | gtgcaatgac | aacatcatct  | 780  |
| tctcagaaga | atataacacc | agcaatcctg | acttgttgct  | agtcataatt | caagtgcacg  | 840  |
| gcacagcct  | cctgccacca | ctgggagttg | ccatatctgt  | catcatcctc | ttctactgct  | 900  |
| accgcgttaa | ccggcagcag | aagctgagtt | caacctggga  | aaccggcaag | acgcggaagc  | 960  |
| tcctggagtt | cagcgagcac | tgtgccatca | tcctggaaga  | tgaccgctct | gacatcagct  | 1020 |
| ccacgtgtgc | caacaacatc | aaccacaaca | cagagctgct  | gcccatgagc | ctggacaccc  | 1080 |
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| agcagtttga | gacagtggca | gtcaagatct | ttccctatga  | ggagtatgcc | tcctggaaga  | 1200 |
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| attatgagcc | tccatttggt | tccaagggtc | gggagcacc   | ctgtgtcgaa | agcatgaagg  | 1800 |
| acaacgtgtt | gagagatcga | gggcgaccag | aaattcccag  | cttctggctc | aaccaccagg  | 1860 |
| gcacccagat | ggtgtgtgag | acgttgactg | agtgtgggga  | ccacgaccca | gaggcccgctc | 1920 |
| tcacagccca | gtgtgtggca | gaacgcttca | gtgagctgga  | gcacatggac | aggctctcgg  | 1980 |
| ggaggagctg | ctcggaggag | aagattcctg | aagacggctc  | cctaaacctc | accaaatagc  | 2040 |

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2090

<210> 57

<211> 4568

<212> DNA

<213> NM\_012408.3| Homo sapiens protein kinase C binding protein 1 (PRKCBP1), transcript variant 2, mRNA

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| tttgacatga  | cggcaccccc  | caagatcctg  | atgagcaagc | ctgtgctgag  | tgggggcaca | 1380 |
| ggcgccggga  | tttccttgto  | ggatatgccg  | cgctccccc  | tgagcacaaa  | ctcttctgtg | 1440 |
| cacacgggct  | ccgacgtgga  | gcaggatgct  | gagaagaagg | ccacgtcgag  | ccacttcagt | 1500 |
| gcgagcgagg  | agtcctatga  | cttcctggat  | aagagcacag | cttcaccagc  | ctccaccaag | 1560 |
| acgggacaag  | caggggagttt | atccggcagc  | ccaaagccct | tctctctca   | actgtcagct | 1620 |
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| gatcgaagca  | aagctgagat  | ggatttgaag  | gagctgagcg | agtcgggtcca | gcaacagtcc | 1740 |
| accctgttc   | ctctcatctc  | tcccaagcgc  | cagattcgta | gcaggttcca  | gctgaattct | 1800 |
| gacaagacca  | tagagagttg  | caaagacaaa  | ttaggcataa | atgaaatctc  | ggaagatgtc | 1860 |
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| gagtatatca  | gtgatgatga  | gcagaagtct  | aagaacgagc | cagaagacac  | agaggacaaa | 1980 |
| gaaggttgtc  | agatggacaa  | agagccatct  | gctgttaaaa | aaaagcccaa  | gcctacaaac | 2040 |
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| atgtgattga aatgatgact ctactcctaa aagggaaaaa acaatatcct tgtttacaga  | 4260 |
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| acgcagagga cgtttgagtc tgggatgaag catgtacgta ttatttatat gatggaattt  | 4500 |
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| gtccgtac   | 4568 |



<211> 2069

<212> DNA

<213> NM\_003270.2| Homo sapiens transmembrane 4 superfamily member 6 (TM4SF6), mRNA

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|            |             |            |             |            |            |      |
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| agttaaaatg | ttttatgact  | ctctgttctg | ctgacaggca  | gagagtcaca | ttgtgtaatt | 1440 |
| taatttcagt | cagtcfaatag | atggcatccc | tcacaggggt  | tgccagatgg | tgataacagt | 1500 |
| gtaaggcctt | gggtctaaag  | catccaagac | tgggaaggac  | tactgatgtt | ctgtgataca | 1560 |
| tcaggtttca | gcacacaact  | tacatttctt | tgccctccaaa | ttgaggcatt | tattatgatg | 1620 |
| ttcatacttt | ccctcttgtt  | tgaaagtctc | taattattaa  | atgggtgtcg | aattgttgta | 1680 |
| ttttccttag | gaattcagt   | gaacttatct | tcattaaatt  | tagctggtac | caggttgata | 1740 |
| tgactttgtc | atattatggt  | caactttaag | tcttagtttt  | cgtttgtgcc | tttgattaat | 1800 |
| aagtataact | cttatacaat  | aaatactgct | ttcctctaaa  | aagatcgtgt | ttaaattaac | 1860 |
| ttgtagaaaa | tctgctggaa  | tggttggtgt | ttccactga   | gaaagctaag | ccctacattt | 1920 |
| ctattcagag | tactgttttt  | agatgtgaaa | tataagcctg  | cggccttaac | tctgtattaa | 1980 |
| aaaaaatggt | tttgtttaaa  | aaaaactggt | cccatagggt  | cagcaaacca | ccatggcaca | 2040 |
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<210> 59

<211> 2402

<212> DNA

<213> NM\_021200.1| Homo sapiens pleckstrin homology domain containing, family B (evectins) member 1 (PLEKHB1), mRNA

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| tcctgtctcg | cccccgcaac  | ctcgcctccg ttccactccg ggaacctcgg cgatgctgag 180 |
| ccaagaccac | ttctgaatca  | gggatgaact gtctagttaa cgtagggtca gagccatcag 240 |
| ttggaaaggc | tgggaggagc  | ctggagaaag aggcgacctt ccttgggac tggtgcgtcc 300  |
| ctccttgctt | ccccctccag  | cctcccaact ggtagcaact tctgatccc cttatctcta 360  |
| aggcgctcag | ggaaatgccc  | cgctgcggga gccttctggg aaatgctgcc ctggccaccc 420 |
| aggaacctat | agccctgcag  | ccccggtccc gctgactccc gctctgaaa gtccctttga 480  |
| agaaatggcc | ctggtagagg  | gcgctgggct gtggagacag agctccatcc tcgcgcgctg 540 |
| gaagcggaac | tggttttgccc | tgtggctgga cgggacctg ggatactacc acgatgagac 600  |

|             |             |            |             |            |             |      |
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| cccagagtgc  | catgatgtgc  | agccccaga  | gggccggagc  | cgagatggcc | tgctgactgt  | 720  |
| gaacctacgg  | gaaggcgccg  | gcctgcacct | ctgtgcggag  | accaaggatg | atgccctagc  | 780  |
| atggaagaca  | gcactgctgg  | aggcaaaact | caccccgggc  | ccagctggag | ccaccgtccc  | 840  |
| tcccaggagc  | cgccgggttt  | gctccaaggt | cagggtgtgt  | accgcctcgt | ggagccccctg | 900  |
| taaggttgag  | aggcggatct  | gggtgcgcgt | ctacagcccg  | taccaagact | actacgaggt  | 960  |
| ggtgcccccc  | aatgcacacg  | aggccacgta | tgtccgcagc  | tactacggac | cgccctacgc  | 1020 |
| aggccctggc  | gtgacgcacg  | tgatagtgcg | ggaggatccc  | tgctacagcg | ccggcgcccc  | 1080 |
| tctggccatg  | ggcatgcttg  | cgggagccgc | cactggggcg  | gcgctggggt | cgctcatgtg  | 1140 |
| gtgcgcctgc  | tggttctgag  | ccctgggact | cgggagcactg | accctgcgcg | ttggattgct  | 1200 |
| agactcctct  | tcctcctgga  | cccctcctc  | taccatccaa  | gccctgtccc | aatttgcccc  | 1260 |
| tatcctctcc  | attagctcct  | tccgggtttg | gaccattccc  | cccactccct | acccttaatc  | 1320 |
| cccacatggg  | aagaagctat  | catcacaggt | acaaacatcg  | cttgaagtct | tcacatctac  | 1380 |
| cactagacac  | ccccaaaato  | tgttatagac | atttatggat  | acatttcctc | taaacacaa   | 1440 |
| agggcacagc  | aaatacgact  | tcatttggct | tcgagttccc  | caggcgctgt | agacacaa    | 1500 |
| tgaatcgggc  | tcctctgctc  | ctccttaggg | agctcgagtc  | ctgggtggga | gaacaggagt  | 1560 |
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| ctggaggggaa | gtttcatgat  | tgcatctata | atgaatatat  | tgccgtgttt | gtgaatactg  | 1860 |
| acacatgtcc  | atacctaaaa  | cactcctgag | ttaagtccca  | tccttcccac | aaacagcttc  | 1920 |
| ctggctggta  | cccatgataa  | caattgagct | gaacctgggg  | accctcggtt | ggggaacagg  | 1980 |
| tgagttctat  | ttgagacttc  | cagccctaga | aagctgcctc  | cgccagaaa  | tgccctctac  | 2040 |
| accaggagct  | cgccctcttc  | tttatagctg | tgactgtcac  | cctctcaggc | tttgtctcat  | 2100 |
| ccttcattct  | gaataagatg  | gcagtggtct | cctctggggc  | ctgacccacc | tctacaccag  | 2160 |
| cccaggaagc  | cccctctgtg  | cctgcctcca | ggtgggtcac  | cagtcctccc | ctttgggttc  | 2220 |
| cttcagctct  | cttccccctt  | tctatcccaa | tcaccaatag  | aaatgctaac | atccctgcct  | 2280 |
| ggtagccaga  | ctagcccact  | aaagctcccc | tgtaaatggg  | ggctccatta | gttctgctgc  | 2340 |

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aa 2402

<210> 60

<211> 2856

<212> DNA

<213> NM\_003661.2| Homo sapiens apolipoprotein L, 1 (APO1), transcript variant 1, mRNA

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|   |      |
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| cagctgagga gctgaagaag gtggctcagg agctggagga gaagctaaac attctcaaca | 1320 |
| ataattataa gattctgcag gcggaccaag aactgtgacc acagggcagg gcagccacca | 1380 |
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| tgctcccggt gttcaagcga ttctctgccc ttggctccc aagtagctgg gactacaggc  | 1560 |
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| gagcacagca ggggaggggt taatgcagat ggcatgagc caaggagaag gcaggaacat  | 1860 |
| tggagcctgc aataaggga aaatgggaac tggagagtgt ggggaatggg aagaagcagt  | 1920 |
| ttactttaga ctaaagaata tattggggg ccgggtgtag tggctcatgc ctgtaatccg  | 1980 |
| agcacttttg gaggccaagg cgggaggatc acgaggtcag gagatcgaga ccatcctggc | 2040 |
| taacacagtg aaaccccgct tctactaaaa atacaaaaaa ttagccgggc atggtggcgg | 2100 |
| gcgcctgtag ttccagctaa ctgggcggct gaggcaggag aatggcgtga acctgggagg | 2160 |
| tggagcttgc agtgagccga gatatcgcca ctgcactcca gcctgggtga cagagcgaga | 2220 |
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| tcaatgtct ccgaagaatg aagtctttcc ctggtgatgg tccctgcgc tgtctttcca   | 2460 |
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| ccctgcttg aacactgaag ggcagggtgt ggccatggc catggtcccc agctgaggag   | 2640 |
| cagggtgtcc tgagaaccca aacttcccag agagtatgtg agaaccaacc aatgaaaaca | 2700 |
| gtccatctgc tcttaccogg taagtaaaca gtcagaaat tagcatgaaa gcagtttagc  | 2760 |
| attgggagga agctcagatc tctagagctg tcttgctgcc gcccaggatt gaactgtgtg | 2820 |
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<210> 61

<211> 1655

<212> DNA

<213> NM\_002164.3| Homo sapiens indoleamine-pyrrole 2,3 dioxygenase (INDO), mRNA

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|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| ggttaatgta | acccaacaag | agcacatfff | atcatagcag | agacatctgt | atgcattcct | 1380 |
| gtcattacc  | attgtaacag | agccacaaac | taatactatg | caatgtttta | ccaataatgc | 1440 |
| aatacaaaag | acctcaaaat | acctgtgcat | ttcttgttag | aaaacaacaa | aaggtaatta | 1500 |
| tgtgtaatta | tactagaagt | tttgaatct  | gtatcttata | attggaataa | aatgacattc | 1560 |
| aataaataaa | aaaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa | aaaaaaaaaa | 1620 |
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<210> 62

<211> 2242

<212> DNA

<213> NM\_021784.3| Homo sapiens forkhead box A2 (FOXA2), transcript variant 1, mRNA

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|          | aaaagagggt  | gggggtgggg  | ggtgattgct | ggtcgtttgt | tgtggctgtt | aaattttaaa | 180 |
|          | ctgccatgca  | ctcggcttcc  | agtatgctgg | gagcggtgaa | gatggaaggg | cacgagccgt | 240 |
|          | ccgactggag  | cagctactat  | gcagagcccg | agggctactc | ctccgtgagc | aacatgaacg | 300 |
|          | ccggcctggg  | gatgaacggc  | atgaacaagt | acatgagcat | gtcggcgccc | gccatgggca | 360 |
|          | gcggctcggg  | caacatgagc  | gcgggctcca | tgaacatgtc | gtcgtacgtg | ggcgctggca | 420 |
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|          | agcagagccc  | caacaagatg  | ctgacgctga | gcgagatcta | ccagtggatc | atggacctct | 780 |
|          | tccccctcta  | ccggcagaac  | cagcagcgct | ggcagaactc | cacccgccac | tgcctctcct | 840 |
|          | tcaacgactg  | tttctgtaag  | gtgcccgcgt | cgcgcgacaa | gcccggaag  | ggctccttct | 900 |
|          | ggaccctgca  | ccctgactcg  | ggcaacatgt | tcgagaacgg | ctgctacctg | cgcgcgcaga | 960 |

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```

<210> 63

<211> 1047

<212> DNA

<213> NM\_033423.2| Homo sapiens granzyme H (cathepsin G-like 2, protein h-CCPX) (GZMH), mRNA

<400> 63



|   |      |
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| gaggccaagc cccactcccg cccctacatg gcctttgttc agtttctgca agagaagagt   | 180  |
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| cagggaagct ccataaatgt caccttgggg gcccaacaata tcaaggaaca ggagcggacc  | 300  |
| cagcagttta tccctgtgaa aagacccatc ccccatccag cctataatcc taagaacttc   | 360  |
| tccaacgaca tcatgtctact gcagctggag agaaaggcca agtggaccac agctgtgcgg  | 420  |
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| ggctgggggt atgtctcaat gagcacttta gcaaccacac tgcaggaagt gttgtgaca    | 540  |
| gtgcagaagg actgccagt tgaacgtctc ttccatggca attacagcag agccactgag    | 600  |
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| tagaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  | 960  |
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<210> 64

<211> 5243

<212> DNA

<213> NM\_001165.3| Homo sapiens baculoviral IAP repeat-containing 3 (BIRC3), transcript variant 1, mRNA

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| aggaaaacga cttctcttag attttttttt cagtttcttc tataaatcaa aacatctcaa   | 180 |
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| tcacaggaac | catgcttgca | aaccactggt | aaaaaaaaaa  | aaaaaaaaaa  | aaaaaagcca  | 1080 |
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| cagaaacatt | tagaaaaaca | aaagttcaaa | aatgttttca  | ggagggtgata | agttgaataa  | 1440 |
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| ttaaatagaa | tatttaattg | tgtaagatct | aatagtatca  | ttatacttaa  | gcaatcatat  | 1860 |
| tcctgatgat | ctatgggaaa | taactattat | ttaattaata  | ttgaaaccag  | gttttaagat  | 1920 |
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<211> 372

<212> DNA

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| gcgccggttc | ctgcaaatgc |
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| gtgcaagaaa | agctgctgct |
| cctgctgccc | tgtgggctgt |
|            | 180        |
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| catctgcaaa | ggggcgtcgg |
| acaagtgcag | ctgctgcgcc |
|            | 240        |
| tgatgtcggg | acagcccccg |
| tcccagatgt | aaagaacgcg |
| acttcacaaa | acctggattt |
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| tttatgtaca | acctgacccg |
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<211> 4180

<212> DNA

<213> NM\_015002.1| Homo sapiens F-box protein 21 (FBXO21), transcript variant 2, mRNA

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| agagaacata | gatgagtaaa  | gtctagagag  | gacattgcac  | ctttgctgct | gtgctatct   | 1920 |
| tccaagagaa | cgggactccg  | gaagaagacg  | tctccacgga  | gcctcggga  | cctgctgcac  | 1980 |
| caggaaagcc | actccaccag  | tagtgcgtgt  | tgccctctac  | taagtttaaa | taccgtgtgc  | 2040 |
| tcttccccag | ctgcaaagac  | aatgttgctc  | tccgcttaca  | ctagtgaatt | aatctgaaag  | 2100 |
| gcactgtgtc | agtggtcag   | cttgatgtct  | tgctcgtgtg  | tgacagtttg | tgacattctg  | 2160 |
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| aattttccaa  | aactttttct | catttttaaa | agccctgtta | taaacgttga | actttcacia | 4080 |
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<210> 68

<211> 6276

<212> DNA

<213> NM\_012156.2| Homo sapiens erythrocyte membrane protein band 4.1-like 1 (EPB41L1), transcript variant 1, mRNA

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| cgccccacct | ccccgacatg | gggaaccccg ggcccaggcg tgctggctac catgacaaca 180 |
| gagacaggcc | ccgactctga | ggtgaagaaa gctcaggagg aggcccccga gcagcccgag 240 |
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|  |      |
|--|------|
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| acagaagaca tcacaagata ctacctgtgc ctgcagctgc gggcagacat catcacgggc  | 780  |
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| ctgggtgact atgatgctga ggagcatgtg ggcaactatg tcagcagctc ccgcttcgcc  | 900  |
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| tggaaggtct gcctcgagca tcatacatto ttcggctggt tgcctccctga gcccccaacc | 1320 |
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| aaactcatcc accgggatcg agactgggaa cgggagcgca ggtgcctcc ctccccgcc    | 1800 |
| tccccctccc ccaagggcac cctgagaaa gccaatgaga gacagggct gaggaggggc    | 1860 |
| tccgaggaga aagtcaaacc accacgtccc cggggcccag agagtacac aggcgatgag   | 1920 |
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<210> 69

<211> 1209

<212> DNA

<213> NM\_173834.2| Homo sapiens hypothetical protein MGC21416 (MGC21416), mRNA

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| ccatttgggt  | gacaaccagt | gacttgggaa | gcacatagat | acatcttaca  | agttgaatag  | 1080 |
| agttgataac  | tattttcagt | tttgagaata | ccagttcagg | tgacgtctct  | aaacacattg  | 1140 |
| ccttatgact  | attagaatat | gcctctcttt | tcataaataa | aaatacatgg  | tctaaaaaaa  | 1200 |
| aaaaaaaaa   |            |            |            |             |             | 1209 |

<210> 70

<211> 5249

<212> DNA

<213> NM\_015352.1| Homo sapiens protein O-fucosyltransferase 1 (POFUT1), transcript variant 1, mRNA

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| tgggaaccag | gccgatcaat tcttgggctc tctggcattt gcaaaagtgc taaaccgtac 240  |
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| cttgaggagg | ttcatggaga agctggcacc caccactgga cccctcgaga agcgggtggc 420  |
| atactgcttt | gaggtggcag ccagcgaag ccagataaag aagacgtgcc ccatgaagga 480   |
| aggaaacccc | tttgcccatc tctgggatca gtttcatgtg agtttcaaca agtcggagct 540  |

|  |      |
|--|------|
| ttttacaggc atttctctca gtgcttcta cagagaacaa tggagccaga gattttctcc   | 600  |
| aaaggaacat ccggtgcttg cctgcccagg agccccagcc cagttcccc tctagagga    | 660  |
| acacaggcca ctacagaagt acatggtatg gtcagacgaa atggtgaaga cgggagaggc  | 720  |
| ccagattcat gccacacctg tccggcccta tgtgggcatt catctgcga ttggtctga    | 780  |
| ctggaagaac gcctgtgcca tgctgaagga cgggactgca ggctcgact tcatggctc    | 840  |
| tccgcagtgt gtgggtaca gccgcagcac agcggcccc ctcacgatga ctatgtgct     | 900  |
| gcctgacctg aaggagatcc agagggtgt gaagctctgg gtgaggtcgc tggatgccc    | 960  |
| gtcgtctac gttgctactg attccgagag ttatgtgct gagctccaac agctcttcaa    | 1020 |
| aggaaggtg aaggtgtgga gcctgaagcc tgaggtggcc caggtcgacc tgtacatct    | 1080 |
| cggccaagcc gaccacttta ttggcaactg tgtctctccc ttcactgcct ttgtgaagcg  | 1140 |
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| gctttctgct ctcttgaggaa ttctcacac tggcaaaagca gtccagcctc cgtctctg   | 1500 |
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| ggggctggtg tgggtctttt ggctgctttt caaggtgtcc ccaatgtgg ccctcaagag   | 1740 |
| ccatccccac tgcttgcca gagccattgt tgtcccctac ttctaggccc atttctgggg   | 1800 |
| cttgggggat gaatgctgct ctgtgctgta aacactatgc aaatggaagt tatcggttgt  | 1860 |
| ggtgctgtgc agcgtctgtg gggcgactaa gtgcactca cgcagcatgt tcctggcaag   | 1920 |
| gagcacatac catcaagcca cactatcatg gtattgttct cacagctctt tgggtggtga  | 1980 |
| tggccactgc aaacctggca ccatacagatc tcttctgata tcttgcccca gtggggcctg | 2040 |
| gttggtagaa tgttgccatt cgggtgatat ccaaagcctg ttctcccagc cgtctctctg  | 2100 |
| cagctggagc ctccaggccg tattctcacg agggaaagct tgccaaggct ctgacctcac  | 2160 |
| agaagatgcc cagggccagc aagccatcag aattatcagt ggagaagcac cttttgactc  | 2220 |
| ttcccttcca atgtaatctc tgccaacacc atgaggctta agtgctcta agtcatgagt   | 2280 |



|             |            |             |             |            |             |      |
|-------------|------------|-------------|-------------|------------|-------------|------|
| gttttggtct  | caaatgctgc | agttttaata  | atctgtgact  | cctgagagcc | catgggtttt  | 2340 |
| tgacctttg   | gttctaaaa  | tccttgtctg  | acccctgtag  | atcttttcc  | tgccatgtca  | 2400 |
| cctcccttg   | cctttgatcc | tggaaagggtg | gcagagccctc | cactgagcca | ggcccagagc  | 2460 |
| tccttgcagt  | gccttcttcc | ttgtttacct  | gtgggaggaa  | acactttttt | tgtcaggggc  | 2520 |
| agcctgggtc  | agagctcaga | ggtcacaactg | tatcaaatgat | ctcaaacagc | aaagtccagca | 2580 |
| tttgctgtat  | agagctgcc  | cccaactcta  | agcaggagaa  | actgtacaga | aagggtcttg  | 2640 |
| ctatttttcc  | cttttgggaa | aacaatgaag  | tgttttaagt  | cctgggtgga | ctgagagatg  | 2700 |
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| cccgtaacat  | ccctgccacc | actaggttgt  | aagcctgtag  | ctgggtggct | gatttcattt  | 2820 |
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| agtggggccc  | gcctaatttt | ttttccccc   | aagacagggc  | ctgtctctgt | ctcccaggct  | 2940 |
| ggagtgcagt  | ggcatgatca | tggttactg   | cagccttgat  | ctcccaggct | caagcgatcc  | 3000 |
| ttctgcctca  | gcctctctgg | tagctgagac  | tgcatgccca  | gctccaaatc | accttgatcc  | 3060 |
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| ctctaattca  | cagaatgcac | ttctacccct  | gtgtgccatg  | gagacctcct | atggaaaaat  | 3600 |
| gatcagccac  | cttaccctct | actgggtacc  | tgctgtgagt  | ctgcctatgc | cagaaggatt  | 3660 |
| aaggagggga  | ggttacccaa | gaaacaaaag  | ctacatgccg  | cttacagccc | ccgttggtatg | 3720 |
| gttgctcagt  | acaacagtct | tgcatccagc  | agggtgtttg  | tcatacctca | ctatgtgtca  | 3780 |
| ggctctatgc  | taggtactgg | ggatacagga  | gagaatcaag  | cgtaaagtct | ttgttctcaa  | 3840 |
| ggaatttgca  | ttctagaaa  | tagaagatgt  | aataaatgta  | ctgtgggaca | tgtaataaag  | 3900 |
| tgctataaag  | aaatataaag | ggtttgggag  | aaaaaagagg  | gagtggatct | attttagatg  | 3960 |

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 5249

<210> 71

<211> 722

<212> DNA

<213> NM\_175617.2| Homo sapiens metallothionein 1E (functional) (MT1E), mRNA

<400> 71

cttgttcgtc tcaactgggt gagctccagc atcccctttg ctggaatgg accccaactg 60

|   |     |
|---|-----|
| ctcttgcgcc actggtggct cctgcacgtg cgccggctcc tgcaagtgca aagagtgcaa | 120 |
| atgcacctcc tgcaagaaga gtgagtgcgg ggccatctcc aggaatctgg ggctgtggct | 180 |
| caggttggga gggaactcaa ggctggccct gagtgcaccc ttctggggaa ctgggctttc | 240 |
| tttgccctca ttgccctgt cattccctct ccaggctttc tgcctataat tcagatgggg  | 300 |
| caggacagca tttttctcgt gggacacaaa cccaactgt accccctatg gtttcagaac  | 360 |
| agagctgtgc cagacgaaaa aaagcatcct ctgggtctgg gttctgagct cgagccaggc | 420 |
| ttgctattag ggcaggggagg tgcccggtca agtctactgc cacctctcac tctcccttc | 480 |
| ttccccaggc tgcgtgtcct gctgccccgt gggtgtgccc aagtgtgccc agggctgcgt | 540 |
| ctgcaaaggc gcatcggaga agtgacgtg ctgtgcctga tgtgggaaca gctcttctcc  | 600 |
| cagatgtaaa tagaacaacc tgcacaaact ggattttttt aaaaatacaa cactgagcca | 660 |
| tttgctgcat ttctttttat actaaatatg tgactgacaa taaaaacaa tttgacttta  | 720 |
| aa  | 722 |

<210> 72

<211> 980

<212> DNA

<213> NM\_003283.3| Homo sapiens troponin T1, skeletal, slow (TNNT1), mRNA

|   |     |
|---|-----|
| <400> 72  |     |
| agcaaggctc agcctcaaga ttcacagcat ctacagcgca gcctaggccg caccaggatg   | 60  |
| tcggacaccg aggagcagga atatgaggag gacgagccgg aagaggaggc tgcggacgag   | 120 |
| gaggagggaag cccccgaaga gccggagccg gtggcagagc cagaagagga acgccccaaa  | 180 |
| ccaagccgcc ccgtggtgccc tcttttgatc ccgccaaaaga tcccagaagg ggagcgcggt | 240 |
| gaattcgatg acatccaccg caagcgcgatg gaaaaagacc tgctggagct gcagacactc  | 300 |
| atcgatgtac atttcgagca gcggaagaag gaggaagagg agctggttgc cttgaaggag   | 360 |
| cgcattgagc ggcgccggtc agagagagcc gagcaacagc gcttcagaac tgagaaggaa   | 420 |
| cgcgaacgtc aggcctaagct gccggaggag aagatgagga aggaagagga agaggccaag  | 480 |
| aagcgggcag aggatgatgc caagaaaaag aaggtgctgt ccaacatggg ggcccatttt   | 540 |
| ggcggtctacc tgggtcaaggc agaacagaag cgtggtaagc ggagagcggg gcgggagatg | 600 |

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| aaggtgcgca | tctctctcga | gcgtaagaag | cctctggaca | ttgactacat | gggggaggaa | 660 |
| cagctccggg | cccgggtctg | ctggctgect | ccatcacagc | cctctcgccc | tgccaggagg | 720 |
| aaagcccagg | agctgtcgga | ctggatccac | cagctggagt | ctgagaagtt | cgacctgatg | 780 |
| gcgaagctga | aacagcagaa | atatgagatc | aacgtgctgt | acaaccgcat | cagccacgcc | 840 |
| cagaagtctc | ggaagggggc | agggaagggc | cgcgttgagg | gccgctggaa | gtgaggatgc | 900 |
| cgccccggac | agtggcacct | gggaagcctg | ggagtgtttg | tcccatcggt | agcttgaaat | 960 |
| aaacgctccc | ctcagacacc |            |            |            |            | 980 |

<210> 73

<211> 2213

<212> DNA

<213> NM\_004067.1| Homo sapiens chimerin (chimaerin) 2 (CHN2), mRNA

|             |             |
|-------------|-------------|
| <400> 73    |             |
| gggcgtgcaa  | aggcgcggag  |
| ggggacggaa  | accacaaata  |
| aatagcggcg  | gcggcagcgc  |
| 60          |             |
| gtcatctggt  | ggagcaggaa  |
| gtgcaggcag  | agtcgggagg  |
| ctgggtcttt  | ctgcgcgtcc  |
| 120         |             |
| ccaggacttt  | gccatgggct  |
| gggggcgcgc  | gaggctgcga  |
| gcggccgggc  | gagggcagcg  |
| 180         |             |
| gcggcggcgt  | ccccaccggg  |
| gctgagcgag  | cagcgacgcg  |
| aggggcgcgc  | ggagatggca  |
| 240         |             |
| gcgtccagca  | actccagcct  |
| gtccggctcg  | tcgggtgtct  |
| ccgatgctga  | agaataccag  |
| 300         |             |
| cctctatat   | ggaaatcata  |
| cttatatcag  | ttacagcaag  |
| aggcacctcg  | tcccaagaga  |
| 360         |             |
| atcatttgtc  | ctcgggaggt  |
| ggaaaaacaga | ccaaaatatt  |
| atggaagaga  | gtttcatggg  |
| 420         |             |
| atcatctctc  | gggagcaggc  |
| ggatgagctt  | cttgaggagcg |
| tggagggtgc  | ctacatcctt  |
| 480         |             |
| agagaaagcc  | agcggcaacc  |
| aggatgctac  | acgctggctc  |
| tcaggtttgg  | aaaccagacc  |
| 540         |             |
| ttaaaactaca | ggctcttcca  |
| cgacgggaaa  | cactttgtgg  |
| gtgagaagag  | gtttgagtcg  |
| 600         |             |
| attcatgata  | tggtgacaga  |
| tggcttgata  | acactgtaca  |
| tagaaaacaa  | agctgccgag  |
| 660         |             |
| tacatttcaa  | aatgacaac   |
| taaccccatc  | tatgaacaca  |
| ttggatatgc  | caccctactc  |
| 720         |             |
| agagaaaaag  | tatccagaag  |
| gctgagcagg  | tctaaaaaat  |
| aaccaagaaa  | aacaaacgtc  |
| 780         |             |
| acacatgaag  | aacacacagc  |
| ggtgaaaaag  | atctctctcc  |
| tggttcgaag  | ggctgccttc  |
| 840         |             |
| acacacaacg  | acaaccactt  |
| caattatgag  | aagacacaca  |
| actttaaggt  | ccacacgttc  |
| 900         |             |
| cgaggcccac  | actggtgtga  |
| atattgtgcc  | aatttcatgt  |
| gggggctcat  | cgcccaaggg  |
| 960         |             |

|             |             |             |            |             |             |      |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| gtccgggtgct | cagactgtgg  | attgaacgta  | cacaaacagt | gttccaagca  | cgttcccaat  | 1020 |
| gactgccaac  | ctgatctcaa  | gaggatcaag  | aaagtgtact | gttgtgacct  | cacaaacctt  | 1080 |
| gtgaaggctc  | acaacactca  | gagacccatg  | gtggtagaca | tatgcattcg  | ggaaattgaa  | 1140 |
| gcaagaggat  | taaaatcgga  | aggcctttac  | agagtctctg | ggttcactga  | acacattgaa  | 1200 |
| gatgtcaaaa  | tggcatttga  | cagagatggg  | gaaaaggcgc | atatatctgc  | caatgtctat  | 1260 |
| ccagacataa  | acatcatcac  | tggagccott  | aaactgtatt | tcagagactt  | accocatccct | 1320 |
| gtcatcacat  | atgataccta  | ttccaaattt  | atagatgcag | caaaaatctc  | caatgcagat  | 1380 |
| gagaggctgg  | aagccgtcca  | tgaagtgtgt  | atgtgtgtgc | ctcctgccca  | ctatgaaacc  | 1440 |
| ctccgggtacc | taatgatcca  | cctcaaaaag  | gttactatga | atgaaaaaga  | caatttcattg | 1500 |
| aatgcagaaa  | atctggggat  | cgtgtttggg  | cccactctga | tgaggccccc  | tgaggacagc  | 1560 |
| accctgacca  | ccctgcatga  | tatgcggtag  | caaaagctga | ttgtgcagat  | tttaatatgaa | 1620 |
| aacgaagacg  | ttttattcta  | atccatcagg  | gaaatgagct | gaatggccca  | gcaccatcaa  | 1680 |
| gttgacacag  | ctaaggataa  | aacattttct  | accacttgat | ttgttttcca  | agcaagtgtct | 1740 |
| agaatttgct  | ggactgcaga  | ggatgcgtga  | gtgggttact | gtgtctcata  | gacatgcgcc  | 1800 |
| acctccacgt  | gagaacaagg  | gtgaagggtga | gggaagcccc | tcagggtggg  | tcttttctgtg | 1860 |
| tgctctctat  | gtatgtctgg  | tttgcgtgaa  | gagtgattaa | tacatcttta  | atttattaaa  | 1920 |
| aaacaatgta  | gaccttttaa  | cttcagttct  | attgggaata | aaagggaaact | taattcatac  | 1980 |
| aggtagctga  | tacagttata  | catttttccac | ttacaaaaag | aagacaattc  | tgttaaatga  | 2040 |
| aacgtgtatc  | gtaaaaatgta | attttattta  | cccacgagaa | tgttgttatt  | ttagcaatag  | 2100 |
| aaactaatgc  | agatgcattg  | gttattaccc  | tgtgtacott | gtccctcatt  | ttgctgtgac  | 2160 |
| acctgaaaa   | agctgaccac  | aaatgcagta  | ttatcattga | catacctctg  | tcc         | 2213 |

<210> 74

<211> 2201

<212> DNA

<213> NM\_005520.1| Homo sapiens heterogeneous nuclear ribonucleoprotein H1 (H) (HNRPH1), mRNA

<400> 74

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|             |            |            |            |            |            |      |
|-------------|------------|------------|------------|------------|------------|------|
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| ggcttgcct   | ggtcttgctc | ggccgatgaa | gtgcagaggt | ttttttctga | ctgcaaaatt | 180  |
| caaaatggg   | ctcaaggtat | tcgtttcate | tacaccagag | aaggcagacc | aagtggcgag | 240  |
| gcttttttg   | aacttgaato | agaagatgaa | gtcaaattgg | ccttgaaaaa | agacagagaa | 300  |
| actatgggac  | acagatatgt | tgaagtatto | aagtoaaaca | acgttgaaat | ggattgggtg | 360  |
| ttgaagcata  | ctgggtccaa | tagtctgac  | acggccaatg | atggctttgt | acggcttaga | 420  |
| ggacttcct   | ttggatgtag | caaggaagaa | attgttcagt | tottctcagg | gttggaatc  | 480  |
| gtgccaaatg  | ggataacatt | gccggtggac | ttccagggga | ggagtacggg | ggaggccttc | 540  |
| gtgcagttt   | cttcacagga | aatagctgaa | aaggctctaa | agaaacacaa | ggaaagaata | 600  |
| gggcacaggt  | atattgaaat | ctttaagagc | agtagagctg | aagttagaac | tcattatgat | 660  |
| ccaccacgaa  | agcttatggc | catgcagcgg | ccaggctcct | atgacagacc | tggggctggt | 720  |
| agaggggtata | acagcatttg | cagaggagct | ggctttgaga | ggatgaggcg | tgggtcttat | 780  |
| ggtggaggct  | atggaggcta | tgatgattac | aatggctata | atgatggcta | tggatttggg | 840  |
| tcagatagat  | ttggaagaga | cctcaattac | tgtttttcag | gaatgtctga | tcacagatac | 900  |
| ggggatggtg  | gctctacttt | ccagagcaca | acaggacact | gtgtacacat | gcggggatta | 960  |
| ccttacagag  | ctactgagaa | tgacatttat | aatttttttt | caccgctcaa | ccctgtgaga | 1020 |
| gtacacattg  | aaatttggtc | tgatggcaga | gtaactggtg | aagcagatgt | cgagttcgca | 1080 |
| actcatgaag  | atgctgtggc | agctatgtca | aaagacaaag | caaatatgca | acacagatat | 1140 |
| gtagaactct  | tottgaatto | tacagcagga | gcaagcgggt | gtgcttacga | acacagatat | 1200 |
| gtagaactct  | tottgaatto | tacagcagga | gcaagcgggt | gtgcttatgg | tagccaaatg | 1260 |
| atggggaggc  | tgggcttgto | aaaccagtc  | agctacgggg | gccagccagc | ccagcagctg | 1320 |
| agtgggggtt  | acggaggcgg | ctacgggtgg | cagagcagca | tgagtggata | cgaccaagtt | 1380 |
| ttacagggaa  | actccagtga | ttttcaatca | aacattgcat | aggtaaccaa | ggagcagtga | 1440 |
| acagcagcta  | ctacagtagt | ggaagccgtg | catctatggg | cgtgaacgga | atgggagggt | 1500 |
| tgtctagcat  | gtccagtatt | agtgggtgat | ggggaatgta | attgatcgat | cctgatcact | 1560 |
| gaactctggt  | caaccttttt | tttttttttt | ttttotttaa | gaaaacttca | gtttaacagt | 1620 |
| ttctgcaata  | caagctttgt | atttatgctt | actctaagtg | gaaatcagga | ttgttatgaa | 1680 |
| gacttaaggc  | ccagtatttt | tgaatacaat | actcatctag | gatgtaacag | tgaagctgag | 1740 |

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| taaactataa | ctgttaaact | taagttccag | cttttctcaa | gtaggtata  | ggatgtactt | 1800 |
| aagcagtaag | cgtatttagg | taaaagcagt | tgaattatgt | taaatgttcg | cctttgccac | 1860 |
| gttaaattga | acactgtttt | ggatgcattg | tgaagacat  | gcttttattt | tttttgtaaa | 1920 |
| acaatatagg | agctgtgtct | actattaaaa | gtgaaacatt | ttggcatggt | tgtaattctt | 1980 |
| agtttcattt | aataacctgt | aagcacgta  | agtttaagct | tttttttttt | ttaagttaat | 2040 |
| gggaaaaatt | tgagacgcaa | taccaatact | taggattttg | gtcttggtgt | ttgtatgaaa | 2100 |
| ttctgaggcc | ttgatttaaa | tctttcattg | tattgtgatt | tccttttagg | tatattgcgc | 2160 |
| taagtgaac  | ttgtcaata  | aatcctcctt | ttaaaaaatg | c          |            | 2201 |

<210> 75

<211> 1895

<212> DNA

<213> NM\_004046.4| Homo sapiens ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle (ATP5A1), nuclear gene encoding mitochondrial protein, transcript variant 2, mRNA

|            |            |
|------------|------------|
| <400> 75   |            |
| gtcttgacct | tctttgcgga |
| agaagtaccg | cctgcggagt |
| gtccgcgcc  | ttctcggcg  |
| attgctgcaa | ggaacttcca |
| atgtcctcta | ttcttgaaga |
| actggcgctg | tcttaagtat |
| caagcagaag | aatggttaga |
| cctgacaatg | ttggtgttgt |
| gtgaagagga | caggagccat |
| gttgatgcc  | ttggtaatgc |
| cgagttggtc | tgaagcccc  |
| actggcatta | aggctgtgga |
| attggtgacc | gacagactgg |
| cgtttcaatg | atggatctga |
|            | tgaaaagaag |
|            | aagctgtact |
|            | gtatttatgt |
|            | tgctattggt |

|  |      |
|--|------|
| caaaagagat ccaactgttg ccagttgggt aagagactta cagatgcaga tgccatgaag  | 900  |
| tacaccattg tgggtgcggc tacggcctcg gatgetgccc cacttcagta cctggctcct  | 960  |
| tactctggct gttccatggg agagtatttt agagacaatg gcaaacatgc ttgatcatc   | 1020 |
| tatgacgact tatccaaaca ggctgttgct taccgtcaga tgtctctgtt gctccgccga  | 1080 |
| ccccctggtc gtgaggccta tctgggtgat gtgtctctac taactcccg gttgctggag   | 1140 |
| agagcagcca aaatgaacga tgcctttggg ggtggctcct tgactgcttt gccagtcata  | 1200 |
| gaaacacagg ctgggtgatgt gtctgcttac attccaaaca atgtcatttc catcactgac | 1260 |
| ggacagatct tcttgaaaac agaattgttc tacaaggta tccgcctgc aattaacgtt    | 1320 |
| ggtctgtctg tatctcgtgt cggatccgct gcccaaacca gggctatgaa gcaggtagca  | 1380 |
| ggtaccatga agctggaatt ggctcagtat cgtgagggtg ctgcttttgc ccagttcggg  | 1440 |
| tctgacctcg atgtgcccac tcaacaactt ttgagtcgtg gcgtgcgtct aactgagttg  | 1500 |
| ctgaagcaag gacagtatcc tcccatggct attgaagaac aagtggctgt tatctatgcg  | 1560 |
| ggtgtaaggg gatattctga taaactggag cccagcaaga ttacaaagtt tgagaatgct  | 1620 |
| ttcttgtctc atgtcgtcag ccagcaccaa gccttggttg gcactatcag ggctgatgga  | 1680 |
| aagatctcag aacaatcaga tgcaaaagctg aaagagattg taacaaattt ctggctgga  | 1740 |
| tttgaagctt aaactcctgt ggattcacat caaataccag ttcagttttg tcattgttct  | 1800 |
| agtaaattag ttccatttgt aaaagggtta ctctcactat ctttatgtac agaaatcaca  | 1860 |
| tgaaaaataa aggttcata atgcatagtt aaaaa                              | 1895 |

<210> 76

<211> 1290

<212> DNA

<213> NM\_001970.3| Homo sapiens eukaryotic translation initiation factor 5A (EIF5A), mRNA

|   |     |
|---|-----|
| <400> 76  |     |
| gcggcggcgg cggttagaggc ggcggcggcg gcggcagcgg gctcggaggc agcggttggg  | 60  |
| ctcggcggcga gcggacgggg tcgagtcagt gcgttcgcgc gagttggaat cgaagcctct  | 120 |
| taaaaatggca gatgacttgg acttcgagac aggagatgca ggggctcagc ccaccttccc  | 180 |
| aatgcagtgct tcagcattac gtaagaatgg ctttgtgggtg ctcaaaggcc ggccatgtaa | 240 |



|  |      |
|--|------|
| gatcgtcgag atgtctactt cgaagactgg caagcacggc cagccaagg tccatctggt   | 300  |
| tggtattgac atctttactg ggaagaaata tgaagatata tgcccgtcaa ctcataatat  | 360  |
| ggatgtcccc aacatcaaaa ggaatgactt ccagctgatt ggcattccagg atgggtacct | 420  |
| atcactgctc caggacagcg gggaggtagc agaggacctt cgtctccctg agggagacct  | 480  |
| tggcaaggag attgagcaga agtacgactg tggagaagag atcctgatca cgggtctgtc  | 540  |
| tgccatgaca gaggaggcag ctgttgcaat caaggccatg gcaaaaatac tggctcccag  | 600  |
| gatggcggtg tgggcagcag tgatcctctg aacctgcaga gggcccctcc ccgagcctgg  | 660  |
| cctggctctg gcccggtcct aagctggact cctcctacac aattttattg acgttttatt  | 720  |
| ttggttttcc ccaccccctc aatctgtcgg ggagcccctg ccttcacctt agctcccttg  | 780  |
| gccaggagcg agcgaagctg tggccttggt gaagctgccc tcctcttctc cctcacact   | 840  |
| acagccctgg tgggggagaa ggggggtggg gctgcttgtg gtttagtctt ttttttttt   | 900  |
| tttttttttt ttttaaatc aatctggaat cagaaagcgg tggattctgg caaatggtcc   | 960  |
| ttgtgccctc cccactcct cctggctctg tcccctgttg cccatagccc ttaccctga    | 1020 |
| gcaccacccc aacagactgg ggaccagccc cctgcctgc ctgtgtctct ccccaaaccc   | 1080 |
| ctttgatgg ggaggggaaga ggaggagagg ggaggggacc tgcccctccc tcaggcatct  | 1140 |
| gggaggggccc tgcccccatg ggctttaccc tcccctgcgg gctctctccc cgacacattt | 1200 |
| gttaaaatca aacctgaata aaactacaag tttaatatga aaaaaaaaaa aaaaaaaaaa  | 1260 |
| aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                   | 1290 |

<210> 77

<211> 2512

<212> DNA

<213> NM\_005041.3| Homo sapiens perforin 1 (pore forming protein) (PRF1), mRNA

|  |     |
|--|-----|
| <400> 77   |     |
| ggctgggtgca aggagccaca gtgggctgcc tggggggctg atgccaccat tccaggagcc | 60  |
| tcggtgaaga gaggatatcc atctgtgtag ccgcttctct atacgggatt ccagctccat  | 120 |
| ggcagcccct ctgctcctcc tgggcatect tctcctgtgt ctgccctgc ccgtccctgc   | 180 |
| cccgtgccac acagccgcac gctcagagtg caagcgcagc cacaagtctg tgccctggtgc | 240 |

|             |            |              |             |             |            |      |
|-------------|------------|--------------|-------------|-------------|------------|------|
| atggctggcc  | ggggagggtg | tggacgtgac   | cagcctccgc  | cgctcgggct  | ccttcccagt | 300  |
| ggacacacaa  | aggttctctg | ggccccacgg   | cacctgcacc  | ctctgtgaaa  | atgccctaca | 360  |
| ggagggcacc  | ctccagcgcc | tgcctctggc   | gtcaccacaa  | tggcggggccc | agggctctgg | 420  |
| ctgccagcgc  | catgtaacca | gggccaaaagt  | cagctccact  | gaagctgtgg  | cccgggatgc | 480  |
| ggctcgtagc  | atccgcaacg | actggaaggt   | cgggctggac  | gtgactccta  | agcccaccag | 540  |
| caatgtgcat  | gtgtctgtgg | cgggctcaca   | ctcacaggca  | gccaactttg  | cagcccagaa | 600  |
| gacccaccag  | gaccagtaca | gcttcagcac   | tgacacgggt  | gagtgcgcgt  | totacagttt | 660  |
| ccatgtggta  | cacactcccc | cgctgcaccc   | tgacttcaag  | aggggccctcg | gggacctgcc | 720  |
| ccaccacttc  | aacgcctcca | cccagccccc   | ctacctcagg  | cttatctcca  | actacggcac | 780  |
| ccacttcctc  | cgggctgtgg | agctgggtgg   | ccgcatatcg  | gcctcactg   | cctgcgcac  | 840  |
| ctgcgagctg  | gccttggaag | ggctcacgga   | caacgaggtg  | gaggactgcc  | tgactgtcga | 900  |
| ggccccaggt  | aacataggca | tccacggcag   | catctctgcc  | gaagccaaag  | cctgtgagga | 960  |
| gaagaagaag  | aagcacaaag | tgacggccctc  | cttcacccaa  | acctaccggg  | agcgccactc | 1020 |
| ggaagtgggt  | ggcgcccatc | acacctccat   | taacgacctg  | ctgttcggga  | tcaggcccg  | 1080 |
| gcccagagcag | tactcagcct | gggtaaaactc  | gctgccccgc  | agccctggcc  | tggtggacta | 1140 |
| caccttgga   | ccctgcacg  | tgctgttgga   | cagccaggac  | ccgcggcggg  | aggcactgag | 1200 |
| gaggggccctg | agtcagtacc | tgacgggacag  | ggctcgtctg  | agggaactgca | gcgggccgtg | 1260 |
| cccaccagg   | cggcagaaga | gcccccgaga   | cccatgccag  | tgtgtgtgcc  | atggctcagc | 1320 |
| ggtcaccacc  | caggactgct | gcctcgggca   | gaggggccctg | gcccagctgg  | aggtgacctt | 1380 |
| catccaagca  | tggggcctgt | gggggggaactg | gttcactgcc  | acggatgcct  | atgtgaagct | 1440 |
| cttcttttgt  | ggccaggagc | tgaggacgag   | caccgtgtgg  | gacaataaca  | accccatctg | 1500 |
| gtcagtgcgg  | ctggattttg | gggatgtgct   | cctggccaca  | ggggggcccc  | tgaggttgca | 1560 |
| ggctctgggat | caggactctg | gcagggaacga  | tgacctcctt  | ggcaactgtg  | atcaggctcc | 1620 |
| caagtctgtt  | tcccatgagg | tgagatgcaa   | cctgaatcat  | ggccacctaa  | aattccgcta | 1680 |
| tcatgccagg  | tgcttgcctc | acctggggagg  | aggcaacctgc | ctggactatg  | tcccccaaat | 1740 |
| gcttctgggg  | gagcctccag | gaaaccggag   | tggggccgtg  | tggtgagac   | agtgagcttg | 1800 |
| gaaaggacca  | gtatgcttgg | actgaagggg   | ttctcacagt  | gggagccagg  | gctgtcttcg | 1860 |
| tattccatt   | agaccaagct | tgtccaaccc   | gaggcccgcga | tgcggcccg   | gatggctttg | 1920 |
| aatgcggccc  | aacgcgaatt | cgcaaacctt   | cttaaacat   | tatgagtttc  | tttttgctat | 1980 |

|            |            |             |            |             |            |      |
|------------|------------|-------------|------------|-------------|------------|------|
| ttttttttt  | tttttagctc | atcggtctatc | gttagtgcta | gtggatttta  | catgtggccc | 2040 |
| aacacaattc | ttttccaac  | gtggcccaga  | gaagccaaaa | gattggatac  | gcacagaca  | 2100 |
| gatggaaaag | ggagattcag | actgtttttc  | agggaggtgg | ctgggtttac  | acgctaattc | 2160 |
| cgattcacc  | tgtecaaact | gcctaagccc  | tccgccattc | tcaagccctg  | cagtcacagc | 2220 |
| tacacagatc | acagcttcag | ccaggagctg  | ggcagaaggc | caagaggctg  | ttcccaccag | 2280 |
| gctgctcagg | gctggtcttt | taggacctt   | cccttgagcc | ctctatgggtg | tggcaaaagc | 2340 |
| ttcattgcct | taactggagc | cccatcagct  | ccagctgctc | tgtctctctt  | gccacaatg  | 2400 |
| ctttgcccct | gagacaaatg | gaggcctgtc  | ctgacctgtc | tcaccatgta  | catagcttga | 2460 |
| taaagggcca | ataaatatga | tgttatgggtg | aaaaaaaaaa | aaaaaaaaaa  | aa         | 2512 |

<210> 78

<211> 4623

<212> DNA

<213> NM\_014965.2| Homo sapiens OGT(O-Glc-NAc transferase)-interacting protein 106 KDa (OIP106), mRNA

|             |            |            |            |            |             |     |
|-------------|------------|------------|------------|------------|-------------|-----|
| <400> 78    |            |            |            |            |             |     |
| gatgctgggc  | caggagcttt | gtgtacacc  | ctccacttca | gctgagccag | ggcatgtctg  | 60  |
| cggcccaggc  | caggggcgag | tgtgtgcct  | gggggcccag | gctgcacgg  | ctcctctggg  | 120 |
| tagggggtcg  | ggggcacc   | caaggatggt | cccttaggg  | gatgttttg  | ctttggggtg  | 180 |
| acttcagcaa  | tgteccctgc | agacaaggc  | gggaagaag  | aatgttttga | atacgaactgc | 240 |
| caggatgaag  | agaggaagcc | aaccacagg  | cagcatgaca | cccaggacct | cttgggaagag | 300 |
| gttttatgtg  | ctgaaagagt | tggccagatg | actaagacat | ataatgacat | agatgctgtc  | 360 |
| actcggcttc  | ttgaggagaa | agagcgggat | ttagaattgg | ccgctcgcat | cgccagctcg  | 420 |
| ttgttgaaga  | agaacaagac | cctaaccgag | aggaacgagc | tgtcggagga | gcaggtggaa  | 480 |
| cacatcagg   | aggaggtgtc | tcagctccgg | catgagctgt | ccatgaagga | tgagctgctt  | 540 |
| cagttctaca  | ccagcgctgc | ggaggagagt | gagcccgagt | ccgtttgtc  | aaccctgtg   | 600 |
| aagaggaaatg | agtcgtctc  | ctcagtcac  | aattactttc | atttggtatc | tcttcaaaag  | 660 |
| aagctgaaag  | accttgaaga | ggagaatgtt | gtacttcgat | ccgaggccag | ccagctgaag  | 720 |
| acagagacca  | tcacctatga | ggagaaggag | cagcagctgg | tcaatgactg | cgtgaaggag  | 780 |

|  |      |
|--|------|
| ctgagggatg ccaatgtcca gattgctagt atctcagagg aactggccaa gaagacggaa  | 840  |
| gatgctgccc gccagcaaga ggagatcaca cacctgctat cgcaaatagt tgatttgcag  | 900  |
| aaaaagccaa aagcttgcgc agtggaatat gaagaacttg tccagcatct gggggctgct  | 960  |
| aaggatgcc agcggcagct cacagccgag ctgcgtgagc tggaggacaa gtacgcagag   | 1020 |
| tgcattgaga tgctgcattg ggcgcaggag gagctgaaga acctccgaa caaaacctag   | 1080 |
| cccaatacca cgtctcggcg ctaccactca ctgggcctgt tccccatgga ttccctggca  | 1140 |
| gcagagattg agggaaacgat gcgcaaggag ctgcagtgtg aagaggccga gtctccagac | 1200 |
| atcactcacc agaagcgtgt ctttgagaca gtaagaaaca tcaaccaggt tgtaacgag   | 1260 |
| agatctctga ccccttctcc catgaacatc cccggctcca accagtcctc ggccatgaac  | 1320 |
| tccctcctgt ccagctgcgt cagcaccctc cggtccagct tctacggcag cgacataggc  | 1380 |
| aacgtcgtcc tcgacacaaa gaccaacagc atcattcttg aaacagaggc agccgacctg  | 1440 |
| ggaaacgatg agcggagtaa gaagccgggg acgcggggca cccagggctc ccacgacctg  | 1500 |
| gagacggcgc tgagggcggt gtccctgcgc cgggagaact acctctcgga gaggagggtc  | 1560 |
| tttgaggagg agcaagagag gaagctccag gagctggcgg agaaggcgga gctgcgcagc  | 1620 |
| ggctccctca caccactga gagcatcatg tccctgggca cgcactcccg ctctccgag    | 1680 |
| ttcaccggct tctctggcat gtccctcagc agccgctcct acctgctga gaagctccag   | 1740 |
| atcgtgaagc cgctggaagg ttccgcaca ctccaccact ggcagcagtt ggcacaacct   | 1800 |
| caccttgggg gcactctgga ccccccggcc ggtgtgggtc ccaagggtct ccggacgctg  | 1860 |
| gatgttgacc tggacaaagt gtactgcctt aacgactttg aagaagatga cacagggtac  | 1920 |
| cacatttctc tcccacgcct agctacotcc actccagttc agcaccaga gacctcaggt   | 1980 |
| gagaggctcc aagcacgtgt gactgtctca ggcagcagaa gttaccggag ccggcctcag  | 2040 |
| gcttccccag agggagatga ggagccgcca gcggccacgg aggaggagga ggaggaggag  | 2100 |
| gaggaggagg ggtctggtga gggcaccacg ataagtcctg taaacttggc acctttcccg  | 2160 |
| gaggcagagt tttggggcat tctcaccctc gttccaggca ccatacctgag tggttctctg | 2220 |
| tctgtagctt ccgctcgtct gtgtgggtga tgattaaagc attctcattg cacagtctcg  | 2280 |
| tttttaataa cagagtctga tgccctctat ttgtaacaat ggggtgagct cccctgccca  | 2340 |
| tcttgagggt gcatggccca tcagggatct ttaaagtggg agcaggaaag gctgctaaaa  | 2400 |
| aaaaaaaaa aaaaagtggg cttttgggtc cctgaaaaca tcagtgccct tcttctcggt   | 2460 |

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| ctgggtgtct | ccctgagttc | aaggggaaga | ttctcaagtc | ccttggtgat | ttccaagtgg | 2520 |
| agctgagcag | ttttaggga  | attgagtgct | gggtcattca | gaaggtaaat | gagatcatct | 2580 |
| gttacctgta | cgctgtatta | aaatagaacc | aggaaaggct | caggatttca | gacatttcgt | 2640 |
| cagccttttc | actttccag  | cttcaatgga | ggtatatatg | tcattttctt | ttcagcttac | 2700 |
| acatgtgttc | aaagtggatt | tttaaaaaag | gttttagcaa | tactccttaa | ccaaaataac | 2760 |
| cttcggagaa | catcactaag | cttttccaga | gagaagacc  | tagatgaagt | tgaaaaagag | 2820 |
| ctctggctga | ctccacccac | tgtccccaag | cattaaagg  | gtggccatga | gtttacagaa | 2880 |
| ttaccacat  | tccagttgcc | actgggatga | aaagctttgt | gctcagagct | ctgggaatca | 2940 |
| tgggatcaca | tggttactgt | ttaccccaac | agcatgctct | gtctagactg | gacctccag  | 3000 |
| ccccttgtgt | tggaaggga  | aagcttttgt | ggagtcagg  | gggagactga | gaaaaaatga | 3060 |
| attaaccctg | tgttgtcatc | ctcatgacat | tcctgaggat | tcaccagggt | agaagtgagg | 3120 |
| acgtttatct | ttgtgattca | taattttcat | ttgtgaagg  | cacaacaact | cccttgaaat | 3180 |
| acagggcagg | aaagagctga | ggttcttggt | ggtgtctccc | attccctcgg | ctaatttcag | 3240 |
| acagctgtgg | tcaagggtat | ttacttgga  | tcaacttttc | cttttttctc | tgacattaat | 3300 |
| tttagagaag | tcatacaagc | atgtgatttg | tttagcacat | aggcttattt | atgggttgat | 3360 |
| tttttttagg | cagttatatt | actagattaa | gcttgtaggg | gaatgaaaa  | gttttttatt | 3420 |
| tgttatctac | acactcga   | aagagaaacc | agctgcggta | ctgtcccatt | ttgtcatca  | 3480 |
| gcaccagtgt | ccgtcaggaa | ggcaggtggt | ggtgcagaaa | catgatgcct | ggctgatttt | 3540 |
| cgtggctaaa | ggggtaggcc | ttatgttgat | tgggatgctc | ccctacagcc | ttacaggtag | 3600 |
| aatagaaggt | gagttctgga | agtgcacaaa | agcaccatta | agtgcattct | ctagaagttg | 3660 |
| tacagaagga | ctaaagctta | tcaagtcaac | aaagaactta | ccttgaggga | tagagagaga | 3720 |
| gaagggacca | attatgagga | ctgacatcct | ggccactctc | cttaaaataa | acactgacat | 3780 |
| ttttcttgct | tggtctctct | gtactcaaac | ctgtggcaaa | ttcatcctag | caacgttatt | 3840 |
| tgacgagggg | catgaacatt | tatagttgaa | actgtagaaa | gggtcaggtt | ggaggtgtgt | 3900 |
| aataaaaaag | aattacctag | gttgccaaag | gtaatttagg | aagggtctga | tcatttagat | 3960 |
| gagagttctt | tggggcttat | tttctgggta | aggctcatct | ttaaaaactg | gcttcagagg | 4020 |
| ggagagggga | gaacaatgaa | ttggctctat | tttctctatt | gggaattaca | ggaccatttt | 4080 |
| gattcttaga | atgtaaaaag | catatcgcta | agtaaatcat | cctggaggct | ccaagtagct | 4140 |
| ctatgcctgc | aatcatggag | acacaggcag | acagataagc | ttcatgggga | aggcatgggg | 4200 |

|            |            |             |            |            |            |      |
|------------|------------|-------------|------------|------------|------------|------|
| catcctctgt | cttgggattt | gtatccatgg  | tggcttggtc | cctgcctttt | aatccgtcct | 4260 |
| ctacgcttgg | gcttttctgt | taccaaacag  | cactatccca | ggaactattg | tctgcctggg | 4320 |
| aacactcagt | agggagacac | tttgagagaca | ggaggtgatg | aaccttttta | tgtgcagctg | 4380 |
| gtatgataga | aggaatttgg | gaaaacttgt  | atgctaggca | cttttgccta | gagcctgctg | 4440 |
| tcccatggag | aaaaagtttt | aagcactgaa  | aaaatttgat | taatgtattt | aaatgtatta | 4500 |
| tttgaagcat | cattcacttg | ttgattttta  | caatcccatg | tcttaaaaag | gatgaatcca | 4560 |
| tgttattgta | ttgtaataaa | tttagattat  | taaaatggat | tgtttaaaaa | aaaaaaaaaa | 4620 |
| aaa        |            |             |            |            |            | 4623 |

<210> 79

<211> 2657

<212> DNA

<213> NM\_017895.6| Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 27 (DDX27), mRNA

|            |   |
|------------|---|
| <400> 79   |   |
| aagtgaagca | tggtacttgc gcaaaagaca cgaggaggct gcgaaaagtt aagggccgga 60   |
| ccgcaggctg | tgcctcgcttc cggaagtggc ttctgcgaca acatgcttgc ggacctcggc 120 |
| ttaatcgga  | ccataggcga ggatgacgag gtgccggtgg agcccagtc tgactccggg 180   |
| gacgaggaag | aggagggggc cattgtgctg ggcagacgac aaaaagcttt ggggaagaac 240  |
| cgcagtgtct | atttcaaccc tgatttcgtt ttacttgaga aggaggggac gtacgatggc 300  |
| agctggggcc | tggtctgatgt catgagccaa ctcaagaaga agagggcagc cactacatta 360 |
| gatgagaaga | ttgagaaagt tcgaaagaaa aggaaacacag aggataaaga agccaagtct 420 |
| gggaagtgtg | aaaaggagaa agaagcaaag gaaggctctg aaccaaagga gcaggaagac 480  |
| cttcaagaga | atgatgagga aggctcagaa gatgaagcct cggagactga ctactcatca 540  |
| gctgatgaga | acatcctcac caaagcagat acactcaaag taaaggatcg gaagaagaag 600  |
| aagaagaaag | gacaggaagc aggaggattt ttgaagatg catctcagta cgatgaaaac 660   |
| ctctcgttcc | aggacatgaa cctttccgcg cctctttctga aggccattac agccatgggc 720 |
| ttcaagcagc | ccaccccgat ccagaaggcg tgcatacctg tgggtctatt ggggaaggac 780  |
| atctgtgcct | gtgcagccac tgggacaggt aaaactgccg cctttgccct gcctgttttg 840  |

|             |            |             |             |             |            |      |
|-------------|------------|-------------|-------------|-------------|------------|------|
| gagcgtctga  | tttataaacc | ccgccaggct  | ccagtcaccc  | gcgtgctggt  | getagtcccc | 900  |
| acccgagagc  | tgggcatcca | ggtgcactct  | gtcaccagac  | agctggccca  | gttctgcaac | 960  |
| atcaccacct  | gcctggctgt | ggcgggcttg  | gatgtgaagt  | ctcaggaagc  | agctcttcgg | 1020 |
| gcagcgctcg  | acatctcat  | cgcaccccca  | ggcggctca   | tcgatccct   | ccacaactgc | 1080 |
| ccttccttcc  | acctgagcag | catcgagggtg | ctcatctctg  | acgaggctga  | caggatgctg | 1140 |
| gatgagtact  | ttgaggagca | gatgaaggag  | atcatccgaa  | tgtgttccca  | ccaccgccag | 1200 |
| accatgctct  | tctcggccac | catgacagac  | gagggtgaaag | atctggcttc  | tgtctccttg | 1260 |
| aagaatcctg  | tccggatatt | tgtgaacagc  | aacacagatg  | tggctccctt  | cctgcggcag | 1320 |
| gagttcatcc  | ggatccggcc | taatcgtgaa  | ggagaccggg  | aagccatcgt  | ggcagctttg | 1380 |
| ttgacgagga  | ccttcactga | ccatgtgatg  | ctgttcacgc  | aaaccaagaa  | gcaggcccac | 1440 |
| cgcattgcaca | tcctcctggg | gctcatgggg  | ctgcagggtg  | gtgagctcca  | tgccaacttg | 1500 |
| tcacagacgc  | agcggttgga | ggccctccgg  | cgttttaagg  | atgaacagat  | tgacatcttc | 1560 |
| gtggccactg  | atgtggcagc | ccgtggactt  | gacattgagg  | gggtcaaaaac | ggtaataaac | 1620 |
| ttcacaaatgc | ctaataccat | caaacattat  | gtccaccggg  | tggggcgaac  | agcactgtct | 1680 |
| ggcagggtctg | ggcgctcagt | ctctctgggtg | ggagaagatg  | agcggaagat  | gctgaaggag | 1740 |
| attgtaaaag  | ctgccaaagg | ccctgtgaag  | gccaggatac  | ttccccaaga  | tgatcatctc | 1800 |
| aaattccggg  | acaagattga | gaaaatggag  | aaagatgtgt  | atgcagttct  | gcagctagag | 1860 |
| gcggaggaaa  | aagagatgca | gcagtcagaa  | gccagatca   | atacagcaaa  | ggggctcctg | 1920 |
| gagaagggga  | aggaggcagt | ggtccaagag  | cccagagagga | gctgggtcca  | gaccaaaaga | 1980 |
| gagagggaaga | aggagaaaat | tgccaaagct  | ctgcaggaaat | ttgacttggc  | cttaagagga | 2040 |
| aagaagaaaa  | ggaagaagt  | tatgaaggat  | gccaaaaaaa  | agggggagat  | gacagcagag | 2100 |
| gaaagggtct  | agtttgaat  | cctcaaggcg  | cagatgtttg  | ctgaacggct  | agcgaagagg | 2160 |
| aatcgagag   | ccaagcgggc | ccgagcaatg  | cccagaggag  | agccagttag  | aggtcctgcc | 2220 |
| aagaagcaaa  | agcaggggaa | gaaatctgta  | tttgtgaag   | aactcaccaa  | cacaagcaag | 2280 |
| aaggccctga  | aacagtatcg | agctagccct  | tcctttgaag  | aaaggaaaca  | gttgggcttg | 2340 |
| ccccaccaga  | gacgaggagg | aaactttaaa  | tctaaatcca  | gatacaagag  | gaggaagtag | 2400 |
| ctgtcgtggc  | ctgaagaaat | tcatgggggc  | agcccttaaa  | tcctctccct  | gtgggaagtc | 2460 |
| atcctggctg  | gtctgtcttt | tctccatttg  | tttaaaaaaa  | aaacaaaaac  | aaaaaacaac | 2520 |

actttggtgt ggtggtatgg tacgtagcta ttttcctaag catgtctgtc aatctccctt 2580  
 cttgctgatt agctttcata tgactatatt aaatggaagt atttttggga aaagagaaac 2640  
 caaaaaaaaa aaaaaaa 2657

<210> 80

<211> 3246

<212> DNA

<213> NM\_018206.3| Homo sapiens vacuolar protein sorting 35 (yeast) (VPS35), mRNA

<400> 80  
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 tccagtcatt ccaaatgaag agatgcctgg acaaaaaaca gcttatggat gctctaaaac 180  
 atgcttctaa tatgcttggt gaactccgga cttctatgtt atcaccaaaag agttactatg 240  
 aactttatat ggccatttct gatgaactgc actacttgga ggtctacctg acagatgagt 300  
 ttgctaaaag aaggaaaagt gcagatctct acgaacttgt acagtatgct ggaacatta 360  
 tcccaagggt ttaccttttg atcacagttg gagttgtata tgcgaagca tttcctcagt 420  
 ccaggaagga tatttttgaa gatttggtag aaatgtgccg tgggtgtgcaa catcccttga 480  
 ggggtctggt tcttcgaaat taccttcttc agtgtagcag aaatatctta cctgatgaag 540  
 gagagccaac agatgaagaa acaactgggt acatcagtga ttccatggat ttgtactgc 600  
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 atagagaaaa aagagaacga gaaagacaag aactgagaat tttagtggga acaaatgttg 720  
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 ttgatattat ttcacagcag gtggtacag tgatacagtc tagacaagac atgccttcag 1080  
 aggatgttgt atctttacaa gtctctctga ttaactcttc catgaaatgt taccctgac 1140



|            |             |             |             |             |             |      |
|------------|-------------|-------------|-------------|-------------|-------------|------|
| gtgtggacta | tgttgataaa  | gttctagaaa  | caacagtgga  | gatattcaat  | aagctcaacc  | 1200 |
| ttgaacatat | tgtctaccagt | agtgcagttt  | caaaggaaact | caccagacctt | ttgaaaatac  | 1260 |
| cagttgacac | ttacaacaat  | attttaacag  | tcttgaaatt  | aaaacatttt  | cacccactct  | 1320 |
| ttgagtactt | tgactacgag  | tcagaaaaa   | gcattgagttg | ttatgtgctt  | agtaatgttc  | 1380 |
| tggattataa | cacagaaatt  | gtctctcaag  | accaggtgga  | ttccataatg  | aatttgggtat | 1440 |
| ccacgttgat | tcaagatcag  | ccagatcaac  | ctgtagaaga  | cctgatcca   | gaagattttg  | 1500 |
| ctgatgagca | gagccttggt  | ggcgccttca  | ttcatctgct  | gcgctctgag  | gaccctgacc  | 1560 |
| agcagtactt | gattttgaac  | acagcacgaa  | aacatttttg  | agctggtgga  | aatcagcgga  | 1620 |
| ttcgtctcac | actgccacct  | ttggatatgtg | cagcttaccac | gtcggtcttt  | cgatataaag  | 1680 |
| agaattctaa | agtggtatgac | aaatgggaaa  | agaaatgcca  | gaagattttt  | tcatttgccc  | 1740 |
| accagactat | cagtgtcttg  | atcaaaagcag | agctggcaga  | attgccctta  | agactttttc  | 1800 |
| ttcaaggagc | actagctgct  | ggggaaaattg | gttttgaaaa  | tcattgagaca | gtcgcatatg  | 1860 |
| aattcatgtc | ccaggcattt  | tctctgtatg  | aagatgaaat  | cagcgattcc  | aaagcacagc  | 1920 |
| tagctgccat | caccttgatc  | attggcaactt | ttgaaaggat  | gaagtgtctc  | agtgaagaga  | 1980 |
| atcatgaacc | tctgaggact  | cagtgtgccc  | ttgctgcate  | caaacttcta  | aagaaaacctg | 2040 |
| atcagggccg | agctgtgagc  | acctgtgcac  | atctctctctg | gtctggcaga  | aacacggaca  | 2100 |
| aaaatgggga | ggagcttca   | ggaggcaaga  | gggtaatgga  | gtgcctaaaa  | aaagctctaa  | 2160 |
| aaatagcaaa | tcagtgcattg | gacccctctc  | tacaagtgcac | gctttttata  | gaaattctga  | 2220 |
| acagatatat | ctatttttat  | gaaaaggaaa  | atgatgcggt  | aacaattcag  | gttttaaac   | 2280 |
| agcttatcca | aaagattcga  | gaagacctcc  | cgaatcttga  | atccagtga   | gaaacagagc  | 2340 |
| agattaacaa | acattttctat | aacacactgg  | agcatttgcg  | cttgcgcgcg  | gaatcaccag  | 2400 |
| aatccgaggg | gccaatttat  | gaaggtctca  | tcctttaaaa  | aggaaatagc  | tcaccatact  | 2460 |
| cctttccatg | tacatccagt  | gagggtttta  | ttacgctagg  | ttccctctcc  | atagattgtg  | 2520 |
| cctttcagaa | atgctgaggt  | agggtttccca | tttcttaacct | gtgatgtggt  | ttaccagaca  | 2580 |
| cctccgaca  | ctcaccttca  | ggaccttaat  | aaaattattc  | acttggtaa   | tgttcaagtc  | 2640 |
| tttctgatca | ccccaagtag  | catgactgat  | ctgcaattta  | aaattcctgt  | gatctgtaaa  | 2700 |
| aaaaaaaaaa | aaaaaaaaaa  | caaaaccac   | aagcacttat  | cttggtact   | aatgaagctc  | 2760 |
| tccttttttt | tggttggttg  | tttgcctcat  | tggtgattgt  | gtattttctt  | cattcctggg  | 2820 |
| gagtactaac | ccaaaagcgt  | ctgtctcttg  | ttttctagtc  | cagtttgaga  | ttaatttaga  | 2880 |

|   |      |
|---|------|
| agaaaggaat actgtatgtg aaattcatct tgggttttcc cctaaattgc aagataaggc | 2940 |
| catgtgtaag attttccta aaactagaat atattaatgc atgtttgaga attttaaac   | 3000 |
| accatggta aaaccagaag ctatatattt catatttga ctcagccatc cattaagaac   | 3060 |
| ccatgttgtc ctctggacat atttatcaat ataattgggt tttaaatagt ataaaagaaa | 3120 |
| acttgtgac tatataatt atgtatcacc ttcattgtaa atttagcagg aaatgcac     | 3180 |
| caattatgat ttttttttt gcaccagtga aacaataaag atgctattaa caaaaaaaaa  | 3240 |
| aaaaaa  | 3246 |

<210> 81

<211> 3182

<212> DNA

<213> NM\_017583.3| Homo sapiens tripartite motif-containing 44 (TRIM44), mRNA

|   |     |
|---|-----|
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| agtgccttgc gcgcgagagg aagcgcaggg acagagcggg gcaggccgag ccggcgga     | 120 |
| gggtcttttc tgetgcgccg ggcagggggc tgccgcggcc ccaggtcccg ctccgagacg   | 180 |
| cggcgcggtc caggcgggag gcgactccct aggaaggagc ccggggcggg aggaggaagt   | 240 |
| gaggccgcgc ggaaggaagg cgcgcagccc cggggccccc aggccttggc cgcgtcacag   | 300 |
| caccacatgc ccctctggag tgggcgcggc ctccgaggaa ctgcctcacg acggcacgtg   | 360 |
| tgacgagtgc gagcccgcag aggcctccgg ggccgaggaa gtgtgccgag aatgcggctt   | 420 |
| ctgctaactgc cgcgcccatg ccgaggcgca caggcagaag ttccctcagtc accatctggc | 480 |
| cgaatacgtc cagcgctccc aggcctggac ccgcgcagct gacggagagg gggcggggaa   | 540 |
| ggaagaagcg gaggtcaagg tggagcagga gaggagata gaaagccagg cagggaaga     | 600 |
| gagtgagtgc gaggaagaga gcgagtcaga ggaagagagc gagacagagg aagagagtga   | 660 |
| ggatgagagc gatgaggaga gtgaagaaga cagcagggaa gaaatggagg atgagcaaga   | 720 |
| aagcgaggcc gaagaagaca accaagaaga aggggaatcc gaggcgagg gagaaactga    | 780 |
| ggcagaaagt gaatttgacc cagaaataga aatggaagca gagagagtgg ccaagaggaa   | 840 |
| gtgtccggac catgggcttg atttgagtac ctattgccag gaagataggc agctcatctg   | 900 |

|  |      |
|--|------|
| tgtcctgtgt ccagtcattg gggctcacca gggccaccaa ctctccaccc tagacgaagc  | 960  |
| ctttgaagaa ttaagaagca aagactcagg tggactgaag gccgctatga tcgaattggt  | 1020 |
| ggaaagggtt aagttcaaga gctcagaccc taaagtaact cgggacacaa tgaagatgtt  | 1080 |
| tatacagcag gaatttaaga aagttcagaa agtgattgct gatgaggagc agaaggccct  | 1140 |
| tcactctagt gacatccaag aggcaatggc cacagctcat gtgactgaga tactggcaga  | 1200 |
| catccaatcc cacatggata ggttgatgac tcagatggcc caagccaagg aacaacttga  | 1260 |
| tacctctaag gaatcagctg agccaaaggc agagggcgat gaggaaggac ccagtgggtgc | 1320 |
| cagtgaagaa gaggacacat gaaggcttgc tccccccagt ggaaaatcat cccctccctc  | 1380 |
| tgtgtgtatg tgacagcgtg tatgtaacgg cttctgattt ctgtgaaagc tgctcagcaa  | 1440 |
| caaacgtact tccaccagat gtgtccccag atccacagca ggcacatatc tctccaaggg  | 1500 |
| atgaccagtt ttatgcttac tgtgtgcttc tcatccccgt gttgtggtag gtcaaggaaa  | 1560 |
| agagccctt tgatccacca ggagcaatta agaaaggctc ttcaggtaat ccctcaatgg   | 1620 |
| ctgctttgaa cttactcagg aaagccagcc cccataatat tgtattacca aacagtatcg  | 1680 |
| ctttgttagg aaggatctgg aataatcttg aagggaagtc agagtttctt cctgcctat   | 1740 |
| taacaaaaac ccaattttgt tcattattgaa gcatgaaata aatgagagca aggtaggggc | 1800 |
| aaattaactc ttgtggacag tccctaaaag tccagttcta cattttgtgaa aattgtggtg | 1860 |
| ccatgaatta agatggatga ctggaaaaag gtgttgagaa aagagttaa gatgaggaag   | 1920 |
| agatattttt agtatatgaa gttatccagg acttgatatt cataattcag tgctgtggaa  | 1980 |
| atgaaaaaaa tgattgaaga ggtggaacgg aaatgacctt agggggaaaa aaaaggacca  | 2040 |
| aagaagtctg attaaaagtt gaaatcagta tttctgaatt caaattgctt gaatttcaa   | 2100 |
| aatagtcagt aaaggatcta atagaaccag aattatttgg gtgaattctg caggttttat  | 2160 |
| gggcttgtca caacgtgaag ggctggaatg tatattacca aatgggaatt tccattgtag  | 2220 |
| gtttttgcta gtccccccc cattttagcc taatttggct taaacgcagt atggggagaa   | 2280 |
| ttgttcccat tccatgtgtt ctgaattcag ctcatctccc agcatataga tatatcctcc  | 2340 |
| tttaactccg accagaaccc ttcttctctg ggcactcccc acccatagac cttcagatca  | 2400 |
| tctccacac cctggatctc actctctctc tagtaacaga gacactcctg aggttgagct   | 2460 |
| tccttgcttt tctctacttc caaatcacaa tttcttacia ccaagcttgg tgctcccgag  | 2520 |
| taagcaggga tgtactaggg gaatgtaaaa ctgcaaaactt aaaaacctgc atcttcttga | 2580 |
| agcatcagtt ttacttacca aatggtttag agtcataaga tgacctattt ttatataaaa  | 2640 |

|  |      |
|--|------|
| gttatattat agaataaaat gtccatacgc atagactggt aagataaaaa aataggaatc  | 2700 |
| ttgcaaggta attcttattt gcaagtggtt tatgtgttca ctctectcta cctttatggt  | 2760 |
| attttgggtt tcacttacga agcatacaac tagaaccata tccaagcaga ctctgggttg  | 2820 |
| ctgttaaccc agggcctaga cttctagtgc ctctgaggca gaaccaaagg agcctgcact  | 2880 |
| ggggaaaate ccttttctg cctgctctgc tgcctgtgac ctgtgtactg attacaggct   | 2940 |
| ttaggcaccg ctgattgtta tgcttcgagg atggttttga aacagaaaca atacttgttt  | 3000 |
| actgtaggaa tctatattat attatttttc agtctctgta atgctgtgaa aagattttatt | 3060 |
| cctttgaggc caggaagctc ccaggcatat atgcttctag gttaggattg tctgactca   | 3120 |
| ctaaagatgc caggatatgt gggctgaggg gagtttgagg tgttaaaaaa aaaaaaaaaa  | 3180 |
| aa   | 3182 |

|         |   |     |
|---------|---|-----|
| 400> 82 | aaaccgcgac tccctggact tgaatgagga ggaggaggcg gcggcggcgg cggcggcgga | 60  |
|         | ggcgctcggc tggggaaagc tagcggcaga ggctcagccc cggcggcagc gcgcgccccg | 120 |
|         | ctgccagccc attttccgga cgccaccgcg gggaactgcc gacgcccccg gggctgccga | 180 |
|         | ggggaggcgc gggggggcga gcggagcgcg gtcccgcgca ctgagccccg cggcgccccg | 240 |
|         | ggaacttgcc ggcgaccga gcccgcgag cgggggcgcg cctccccgc cgcgcgcctc    | 300 |
|         | ctgcatgcgg ggcgccagct ccgggcgcgc gccggagccc ccccggcgc ccccgagcc   | 360 |
|         | ccccgcgcgc cgcgcgcgc gcgcgcgcgc tccatgcacc gcttgatggg ggtcaacagc  | 420 |
|         | accgcgcgcg ccgcgcgcgc gcagcccaat gtctctcgca cgtgcaactg caaacgctct | 480 |
|         | ttgttcaga gcatggagat cacggagctg gagtgtgttc agatcatcat catcgtggtg  | 540 |
|         | gtgatgatgg tgatggtggt ggtgatcacg tgctgctga gccactacaa gctgtctgca  | 600 |
|         | cgtctcttca tcagccggca cagccagggg cggaggagag aagatgcctt gtcctcagaa | 660 |
|         | gqatgcctgt gqccctcgga gacacacatg tcaggcaacg gaatccca gaaccacgctc  | 720 |

|            |            |            |            |            |             |      |
|------------|------------|------------|------------|------------|-------------|------|
| tacgccccgc | ctcgccccac | cgaccgcctg | gccgtgccgc | ccttcgccca | gcgggagcgc  | 780  |
| ttccaccgct | tcagccccac | ctatccgtac | ctgcagcacg | agatcgacct | gcccccacc   | 840  |
| atctcgctgt | cagacgggga | ggagccccca | ccctaccagg | gccctgcac  | cctccagctt  | 900  |
| cgggaccccg | agcagcagct | ggaactgaac | cgggagtcgg | tgcgcgcacc | cccaaacaga  | 960  |
| accatcttcg | acagtgcact | gatggatagt | gccaggtcgg | gcggccccct | ccccccagc   | 1020 |
| agtaactcgg | gcatacgcgc | cacgtgctac | ggcagcggcg | ggcgcagtga | ggggccgcgg  | 1080 |
| cccacctaca | gcgaggtcat | cggccactac | ccggggtcct | ccttcacgca | ccagcagagc  | 1140 |
| agtggggcgc | cctccttgct | ggaggggacc | cggtccacc  | acacacacat | cgcgccccta  | 1200 |
| gagagcgag  | ccatctggag | caaagagaag | gataaacaga | aaggaccccc | tctctagggt  | 1260 |
| ccccaggggg | gccgggctcg | ggctgcgtag | gtgaaaaggc | agaacactcc | gcgcttctta  | 1320 |
| gaagaggagt | gagaggaagg | cggggggcgc | agcaacgcac | cgtgtggccc | tcccccca    | 1380 |
| cctccctgtg | tataaatatt | tacatgtgat | gtctggtctg | aatgcacaag | ctaagagagc  | 1440 |
| ttgcaaaaaa | aaaaagaaaa | aagaaaaaaa | aaaaccacgt | ttctttgttg | agctgtgtct  | 1500 |
| tgaaggcaaa | agaaaaaaa  | tttctacagt | agtctttctt | gtttctagtt | gagctgcgtg  | 1560 |
| cgtgaatgct | tattttcttt | tgtttatgat | aatttcaact | aactttaaag | acataattgc  | 1620 |
| acaaaacctt | tgtttaaga  | tctgcaatat | tatatatata | aatatatata | agataagaga  | 1680 |
| aactgtatgt | gcgagggcag | gagtattttt | gtattagaag | aggcctatta | aaaaaaaaag  | 1740 |
| ttgtttctcg | aactagaaga | ggaaaaaaat | ggcaattttt | gagtgccaag | tcagaaagtg  | 1800 |
| tgtattacct | tgtaagaaaa | aaaattacaa | agcaggggtt | tagagtattt | tataataaatg | 1860 |
| ttgagatttt | gcactatttt | ttaataataa | tatgtcagtg | cttgcttgat | ggaaacttct  | 1920 |
| cttgtgtctg | ttgagacttt | aagggagaaa | tgtcggaatt | tcagagtgcg | ctgacggcag  | 1980 |
| agggtgagcc | cccgtggagt | ctgcagagag | gccttggcc  | ggagcggcgg | gctttccgga  | 2040 |
| ggggccactg | tcctctcgag | gtggatgctt | ctgcctagtg | acaggttatc | accacgttat  | 2100 |
| atattcccta | ccgaaggaga | caccttttcc | cccctgaccc | agaacagcct | ttaaatcaca  | 2160 |
| agcaaaatag | gaaagttaac | cacggaggca | ccgagttcca | ggtagtgggt | ttgcctttcc  | 2220 |
| caaaaatgaa | aataaactgt | taccgaagga | attagttttt | cctcttcttt | tttccaactg  | 2280 |
| tgaaggtccc | cgtgggtggg | agcatgggtc | ccctcacaag | ccgcagcggc | tggtgcccg   | 2340 |
| gctaccaggg | acatgccaga | gggtcagatg | acttgtctct | gcagggcgct | ttggtggttg  | 2400 |

|            |            |             |            |            |             |      |
|------------|------------|-------------|------------|------------|-------------|------|
| ttcagctggc | taaagggtta | ccggtgaagg  | caggtgcggt | aactgccgca | ctggacccta  | 2460 |
| ggaagcccca | ggtattcgca | atctgacctc  | ctcctgtctg | tttcccttca | cggatcaatt  | 2520 |
| ctcacttaag | aggccaataa | acaaccaaac  | atgaaaaggt | gacaagcctg | ggttttctcc  | 2580 |
| aggataggtg | aaaggggtta | aatgagtaaa  | gcagttgagc | aaacaccaac | ccgagcttcg  | 2640 |
| ggcgcagaat | tcttccacct | ctcttccctc  | ttccatctcc | tttccccgcg | gaaacaacgc  | 2700 |
| ttcccttctg | gtgtgtctgt | tgatctgtgt  | tttcatttac | atctctctta | gactccgctc  | 2760 |
| ttgtttctca | ggttttcacc | agatagattt  | ggggttggcg | ggacotgctg | gtgacgtgca  | 2820 |
| ggtgaaggac | aggaaggggc | atgtgagcgt  | aaatagaggt | gaccagagga | gagcatgagg  | 2880 |
| ggtgggctt  | tgggacccac | cggggccagt  | ggctggagct | tgacgtcttt | ctctccccatg | 2940 |
| ggggtgggag | ggccccacgc | tggaaagagc  | gactcccagc | tgctaccccc | tcctttccca  | 3000 |
| tgggagtgcc | tttccatttt | gggcagaatg  | ctgactagta | gactaacata | aaagatataa  | 3060 |
| aaggcaataa | ctattgtttg | tgagcaactt  | ttttataact | tccaaaacaa | aaacctgagc  | 3120 |
| acagttttga | agttctagcc | actcgagctc  | atgcattgtg | aacgttgctt | ttacgaaggt  | 3180 |
| ggcagctgac | agacgtgggc | tctgcattgc  | gccagcctag | tagaaaagtc | tcgttcattg  | 3240 |
| gcaacagcag | aacctgcctc | tcctggaagt  | cgtcagccta | aaatttgttt | ctctcttgaa  | 3300 |
| gaggattctt | tgaaaaggct | ctgcagagaa  | atcagtaacg | gttatccgca | aaggtacaag  | 3360 |
| gacgcacttg | taaagatgat | taaaacgtat  | cttctcttta | tgtgacgcgt | ctctagtgcc  | 3420 |
| ttactgaaga | agcagtgaca | ctcccgtcgc  | tcggtgagga | cgttcccggg | cagtgcctca  | 3480 |
| ctcacctggg | actggtattc | cctcccaggg  | tccaccaagg | gctcctgctt | ttcagacacc  | 3540 |
| ccatcatcct | cgcgcgtcct | cacctgtctc  | ctaccaggga | ggtgcctagc | ttggtgaggt  | 3600 |
| tactcctgct | cctccaaact | ttttttgcca  | aggtttgtac | acgaactcca | tctaggtgga  | 3660 |
| aaacctagaa | gtggaccttg | tgtgtgtgca  | tggtgtcagc | ccaaaagccg | gctgagacag  | 3720 |
| tcctcatatc | ctcttgagcc | aaactgtttg  | ggtctcgttg | cttcatggta | tggtctggat  | 3780 |
| ttgtgggaat | ggctttgcgt | gagaaagggg  | aggagagtgg | ttgctgcctc | cagccggctt  | 3840 |
| gaggacagag | cctgtccctc | tcattgacaac | tcagtgttga | agcccagctg | cctcagcttc  | 3900 |
| atgtccagt  | gatggcgcaa | gttcatgggg  | tagtgccctc | tcaaaagcgt | ggcgcatccc  | 3960 |
| aagacagcca | gcaggttgct | tctggaacgc  | accagagtta | agctctcgcc | ttctctgctg  | 4020 |
| agggtgcacc | cttctctcta | gatggtagtt  | gtcacgttat | ctttgaaaac | tcttgagctg  | 4080 |
| ctcctgagga | ggccctcttt | tccagtagga  | agttagatgg | gggttctcag | aagtggctga  | 4140 |

|   |      |
|---|------|
| ttggaagggg acaagcttcg tttcaggggt ctgccgttcc atcctgggtc agagaaggcc | 4200 |
| gagcgtggct ttctctagcc ttgtcactgt ctccctgcct gtcaatcacc acctttcttc | 4260 |
| cagaggagga aaattatctc cctgcaaag cccggttcta cacagatttc acaaattgtg  | 4320 |
| ctaagaaccg tccgtgttct cagaaagccc agtggttttg caaagaatga aaagggaccc | 4380 |
| catatgtagc aaaaatcagg gctgggggag agccgggttc attccctgtc ctcatgtgtc | 4440 |
| gtccctatga attgtactgt tcagagaaat ttttttctct atgtgcaaca cgaagcttcc | 4500 |
| agaaccataa aatatcccg tgcataaggaa agaaaatgtc gttgtgtgtg tttttctgga | 4560 |
| aactgcttga aatcttgcgt tactatagag ctcaagaaga cacagcccg cctccctgc   | 4620 |
| ctgcctgatt ccatggctgt tgtgctgatt ccaatgcttt cacgttggtt cctggcgctg | 4680 |
| gaactgctct cctttgcagc cccatttccc aagctctgtt caagttaaac ttatgtaagc | 4740 |
| tttccgtggc atgcggggcg cgcaccacacg tccccgtgc gtaagactct gtatttggat | 4800 |
| gccaatccac aggcctgaag aaactgcttg ttgtgtatca gtaatcatta gtggcaatga | 4860 |
| tgacattctg aaaagctgca atacttatac aataaatttt acaattcttt ggaaaaaaaa | 4920 |
| aaaaaaaaaa  | 4930 |

<210> 83

<211> 702

<212> DNA

<213> NM\_014183.2| Homo sapiens dynein, cytoplasmic, light polypeptide 2A (DNCL2A), transcript variant 1, mRNA

|   |     |
|---|-----|
| <400> 83  |     |
| cgcagaaagg cacaggactc gctaagtgtt cgctacgcgg ggctaccgga tcggtcggaa | 60  |
| atggcagagg tggaggagac actgaagcga ctgcagagcc agaagggagt gcagggaatc | 120 |
| atcgtcgtga acacagaagg cattcccatc aagagcacca tggacaaccc caccaccacc | 180 |
| cagtatgcca gcctcatgca cagcttcato ctgaaggcac ggagcaccgt gcgtgacatc | 240 |
| gacccccaga acgatctcac ctctcttcga attcgtccca agaaaaatga aattatggtt | 300 |
| gcaccagata aagactattt cctgattgtg attcagaatc caaccgaata agccactctc | 360 |
| ttggctccct gtgtcattcc ttaatttaat gcccccaag aatgttaatg tcaatcatgt  | 420 |
| cagtggacta gcacatggca gtcgcttgga acccactcac accaatccag tgaccgtgtg | 480 |

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| tggtggtggc | gctcttctcc | cccaccaacg | gaacctctgt | gtgcaccaac | cttccccaga | 540 |
| gctccggagc | gccctctcct | cacttccagg | ttttggagca | agagcttgca | ggaagccgc  | 600 |
| accagcttc  | cttctgacct | tcagttcact | ttgtcgccct | tggagaaagc | tgtttttctt | 660 |
| taactaaaa  | taacaaaaat | gcttaaaaa  | aaaaaaaaaa | aa         |            | 702 |

<210> 84

<211> 2100

<212> DNA

<213> NM\_015907.2| Homo sapiens leucine aminopeptidase 3 (LAP3), mRNA

|            |            |             |
|------------|------------|-------------|
| <400> 84   |            |             |
| ctgcccatcc | gtcccccccc | ctagacgcac  |
| gtccgctcgc | ccggcgcccg | agccagtcgc  |
| 60         |            |             |
| cgcgccagcc | gtctgcgcgc | cgaaagcccc  |
| gccccaaagg | cgccccgcc  | accgctctcc  |
| 120        |            |             |
| acgtgctcgc | tggagggcgg | tgcgaggggc  |
| cgagccgaca | agatgttctt | gtgcctctt   |
| 180        |            |             |
| ccggctgcgg | ggcgagtagt | cgtccgacgt  |
| ctggccgtga | gacgtttcgg | gagccggagt  |
| 240        |            |             |
| ctctccaccg | cagacatgac | gaagggcctt  |
| gttttaggaa | tctattccaa | agaaaaagaa  |
| 300        |            |             |
| gatgatgtgc | cacagttcac | aagtgcagga  |
| gagaattttg | ataaattgtt | agctggaaag  |
| 360        |            |             |
| ctgagagaga | ctttgaacat | atctggacca  |
| cctctgaagg | cagggaaagc | tcgaaccttt  |
| 420        |            |             |
| tatggctcgc | atcaggactt | ccccagcgtg  |
| gtgctagtgt | gcctcggcaa | aaaggcagct  |
| 480        |            |             |
| ggaatcgacg | aacaggaaaa | ctggcatgaa  |
| ggcaaagaaa | acatcagagc | tgctgttgca  |
| 540        |            |             |
| gcggggtgca | ggcagattca | agacctggag  |
| ctctcgtctg | tggaggtgga | tcctctgtgga |
| 600        |            |             |
| gacgctcagg | ctgctgcgga | gggagcgggt  |
| cttggtctct | atgaatacga | tgacctaaag  |
| 660        |            |             |
| caaaaaaaa  | agatggctgt | gtcggcacaa  |
| ctctatggaa | gtggggatca | ggaggcctgg  |
| 720        |            |             |
| cagaaaggag | tctctgtttg | ttctgggcag  |
| aacttggcac | gccaatgtat | ggagacgcca  |
| 780        |            |             |
| gccaatgaga | tgacgccaac | cagatttgct  |
| gaaattattg | agaagaatct | caaaagtgtt  |
| 840        |            |             |
| agtagtaaaa | ccgaggtcca | tatcagaccc  |
| aagtcttgga | ttgaggaaca | ggcaatggga  |
| 900        |            |             |
| tcattctctc | gtgtggccaa | aggatctgac  |
| gagccccag  | tcttcttgga | aattcactac  |
| 960        |            |             |
| aaaggcagcc | ccaatgcaaa | cgaaccaccc  |
| ctggtgtttg | ttgggaaagg | aattaccttt  |
| 1020       |            |             |
| gacagtgtgt | gtatctccat | caaggcttct  |
| gcaaatatgg | acctcatgag | ggctgacatg  |
| 1080       |            |             |



|  |      |
|--|------|
| ggaggagctg caactatatg ctcagccatc gtgtctgctg caaagcttaa ttgtcccatt  | 1140 |
| aatattatag gtctggcccc tctttgtgaa aatatgccca gcggcaagcg caacaagccg  | 1200 |
| ggggatgttg tttagagcaa aaacgggaag accatccagg ttgataacac tgatgctgag  | 1260 |
| gggaggctca tactggctga tgcgctctgt tacgcacaca cgtttaaccc gaaggtcatc  | 1320 |
| ctcaatgccg ccaccttaac aggtgccatg gatgtagctt tgggatcagg tgccactggg  | 1380 |
| gtctttacca attcatcctg gctctggaac aaactcttcg aggcagcat tgaacacagg   | 1440 |
| gaccgtgtct ggaggatgcc tctcttcgaa cattatacaa gacaggttgt agattgccag  | 1500 |
| cttgctgatg ttaacaacat tggaaaatac agatctgcag gacgatgtac agctgcagca  | 1560 |
| ttcctgaaag aattcgtaac tcatcctaag tgggcacatt tagacatagc aggcgtgatg  | 1620 |
| accaacaaag atgaagtcc ctatctacgg aaaggcatga ctgggaggcc cacaaggact   | 1680 |
| ctcattgagt tottacttcg ttccagtcga gacaatgctt agttcagata ctcaaaaatg  | 1740 |
| tcttactctt gtcttaaat ggacagtga acttaaaagg tttttgaata aatggatgaa    | 1800 |
| aatcttttaa cggagacaaa ggatggtatt taaaaatga gaacacaatg aaatttgtat   | 1860 |
| gccttgattt ttttttcatt tcacacaaaag atttataaag gtaaatgtaa tatcttactt | 1920 |
| gataaggatt ttaagatac tctataaatg attaaaattt ttagaacttc ctaatcactt   | 1980 |
| ttcagagtat atgtttttca ttgagaagca aaattgtaac tcagatttgt gatgctagga  | 2040 |
| acatgagcaa actgaaaatt actatgcaat tgtcagaaac aataaatgca actgtgtgtg  | 2100 |

<210> 85

<211> 1510

<212> DNA

<213> NM\_018478.1| Homo sapiens chromosome 20 open reading frame 35 (C20orf35), mRNA

|  |     |
|--|-----|
| <400> 85   |     |
| cgagtgtggc caagggtgcc ggaggcagg ttccgggtgc tagtcgttcg gtggcgctg    | 60  |
| cccaaaaggc gcagagcatc aagtgtgcgt gggcagaacc ggcgcggcg ccgcgcgcg    | 120 |
| gtctgcgcgg ggcgggggag cagcaagtgc atccgagcga gcggagacta gcgcaccggc  | 180 |
| gtcgggtggc aggggtgtgc agaggagtcc ggctggggcg agggaggag gatgggtgcg   | 240 |
| ggtaactttt tgaccgcctt ggaagtacca gtaccgcgcg tcgcagggcg tgccctccgac | 300 |

|  |      |
|--|------|
| cgccgggcca gctgcgagcg agtgagcccg ccaccgcccc tcccccaett ccgcctcggc  | 360  |
| acgaggcctc ttctctgttc ccggctccca gggcccggtg ccaggccgga gccagggggcc | 420  |
| ccactgttgg gatgctgggt gcagtggggc gccccagcc caggccccct ctgtttcttc   | 480  |
| tttcgacttt gcagctgtac ttgttttgc cctctaccgc caggagctga catggaccca   | 540  |
| aatcctcggg ccgcctcgga gcgccagcag ctccgccttc gggagcgcca aaaattcttc  | 600  |
| gaggacattt tacagccaga gacagagttt gtctttcttc tgtcccatct goactctgag  | 660  |
| tgcagagac cccccatagg tagtatctca tccatggaag tgaatgtgga cacactggag   | 720  |
| caagtagaac ttattgacct tggggacccg gatgcagcag atgtgttctt gccttgcgaa  | 780  |
| gatctccac caacccccca gtctgtctggg gtggacaacc atttgaggga gctgagcctg  | 840  |
| ccggtggcta catcagacag gaccacatct aggaacctct cctcctcttc ctccgactcc  | 900  |
| tccaccaacc tgcatagccc aaatccaagt gatgatggag cagatacgcc ctgggcacag  | 960  |
| toggatgaag aggaggaagg ggggtgatga ggggcagagc ctggagcctg cagctagcag  | 1020 |
| tgggcccctg cctacagact gaccacgctg gctattcttc acatgagacc acaggcccag  | 1080 |
| ccagagcctg tcgggagaag accagactct ttacttgcag taggcaccag aggtgggaag  | 1140 |
| gatggtggga ttgtgtacct ttctaagaat taacctcttc ctgctttact gctaattttt  | 1200 |
| tcctgtgca accctccac cagtttttgg cttactctg agatatgatt tgcaaatgag     | 1260 |
| gagagagaag atgaggttgg acaagatgcc actgcttttc ttagcactct tccctccct   | 1320 |
| aaaccatccc gtagtcttct aatacagtct ctacagacaag tgtctctaga tggatgtgaa | 1380 |
| ctccttaact catcaagtaa ggtggtactc aagccatgct gcctccttac atcctttttg  | 1440 |
| gaacagagca cggtataaat aataaactaa taataatatg ccaacaaaaa aaaaaaaaaa  | 1500 |
| aaaaaaaaaa   | 1510 |

<210> 86

<211> 3105

<212> DNA

<213> NM\_030674.2| Homo sapiens solute carrier family 38, member 1 (SLC38A1), mRNA

<400> 86

|  |    |
|--|----|
| gcacgaggga ctggggcggc cagcactcc gccagaaggt cgccaggagc ctccgccctt | 60 |
|--|----|

|            |            |            |             |             |             |      |
|------------|------------|------------|-------------|-------------|-------------|------|
| caccttcctc | ggaaatccgc | caggccacgc | aagctccctg  | cccaaccctt  | actgacgggg  | 120  |
| gccacatttt | cccggcctcc | gcagccagac | cttgacacaa  | aggacatcaa  | actgccgagg  | 180  |
| gtaaaaaccc | cggaaggcgc | gacacctcca | catcgctttt  | tgccaccttt  | ccctttattt  | 240  |
| ccggagatat | ttattgagtg | tctactgtgt | gccaggcact  | atatctatgt  | gcatagaaaa  | 300  |
| accttggaag | gccatacaac | aatatatata | gagtgatcgt  | ctctgtctgc  | tgagctaaca  | 360  |
| ggggtgtcaa | gcttcattt  | tggtatctac | ttctaataac  | actcagaaca  | ggagaaattt  | 420  |
| ggactaattt | tcaaacatac | gacactttct | aatcatgatg  | catttcaaaa  | gtggactcga  | 480  |
| attaactgag | ttgcaaaaa  | tgacagtgcc | cgaggatgat  | aacattagca  | atgactccaa  | 540  |
| tgatttcacc | gaagtagaaa | atggtcagat | aaatagcaag  | tttatttctg  | atcgtgaaa   | 600  |
| tagaagaagt | ctcacaacaa | gccatttgga | aaaaaagaag  | tgtgatgagt  | atattccagg  | 660  |
| tacaacctcc | ttaggcatgt | ctgtttttta | cctaagcaac  | gccattatgg  | gcagtgggat  | 720  |
| tttgggactc | gcctttgcc  | tggaacaac  | tggaatccta  | ctttttctgg  | tacttttgac  | 780  |
| ttcagtgaca | ttgctgtcta | tatattcaat | aaacctccta  | ttgatctgtt  | caaaagaaac  | 840  |
| aggctgcata | gtgatgaaa  | agctggggga | acaagtcttt  | ggcaccacag  | ggaagtctgt  | 900  |
| aatctttgga | gccacctctc | tacagaacac | tggaagcaatg | ctgagctacc  | tcttcatcgt  | 960  |
| aaaaaatgaa | ctacctctg  | ccataaagtt | tctaattgga  | aaggaagaga  | cattttcagc  | 1020 |
| ctggtaactg | gatggccgcg | ttctggtggt | gatagttacc  | ttggcataaa  | ttctccctct  | 1080 |
| gtgtctcttg | aagaacttag | ggtatcttgg | ctatactagt  | ggattttcct  | tgagctgtat  | 1140 |
| ggtttttttc | ctaattgtgg | ttatttacaa | gaaatttcaa  | attccctgca  | ttgttccaga  | 1200 |
| gctaaattca | acaataagtg | ctaattcaac | aaatgctgac  | acgtgtacgc  | caaaatatgt  | 1260 |
| taccttcaat | tcaaagaccg | tgtatgcttt | accacacatt  | gcatttgcata | ttgtttgcc   | 1320 |
| cccgtcagtc | ctgccatttt | acagtgcgct | taaagaccga  | tcacagaaaa  | aaatgcagat  | 1380 |
| ggtttcaaac | atctcctttt | tcgccatggt | tggtatgtac  | ttcttgactg  | ccatttttgg  | 1440 |
| ctacttgaca | ttctatgaca | acgtgcagtc | cgacctcctt  | cacaaatata  | agagtaaaga  | 1500 |
| tgacattctc | atcttgacag | tgcggtctgg | tgctattggt  | gctgtgatcc  | tcacagtgcc  | 1560 |
| gggtgtattt | ttcaccgata | gttcatcttt | atttgaaactg | gctaagaaaa  | caaagttaa   | 1620 |
| tttatgtcgt | cataccgtgg | ttacctgcat | actcttggtt  | gttatcaact  | tggttggtgat | 1680 |
| cttcataccc | tccatgaagg | atattttttg | agtcgttaga  | gttatcatctg | ctaacatgct  | 1740 |
| tattttcatt | cttccttcat | ctctttattt | aaaaatcaca  | accaggatgg  | agataaagga  | 1800 |

|             |             |             |             |             |            |      |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| actcaaagaa  | tttgggctgc  | ccttttcttg  | ggcctggggg  | tgtgtttctc  | cttggtcagc | 1860 |
| attcccttgg  | tcacttatga  | ctgggcctgc  | tcacgagta   | atgggtgaagg | ccactgaaac | 1920 |
| ccgccgagaa  | aaagaaacat  | cctgttgtgc  | tgctcagtca  | agtcgccaca  | catcagcaat | 1980 |
| ctctcaccac  | ttcttttgca  | agtttacaga  | agcaaacaga  | aatgtacagg  | atacttaaaa | 2040 |
| tggaataaact | ttttggttgc  | aaaacagaga  | catggtttcta | taatgtctca  | tgccotcca  | 2100 |
| agatttgaga  | tcaatttagg  | gatttgtgaa  | tttttttttc  | aaatttcata  | caatcatatt | 2160 |
| tcccagtact  | tttcacaato  | attttttacc  | catctaaact  | tatgttttgt  | ggcttcccg  | 2220 |
| tctcttagaa  | ctttgaaaa   | atgatataca  | ataatgttta  | ttattatac   | atccagattc | 2280 |
| tgaaaaaatt  | ttcctactga  | tgttcagctc  | acactatctg  | taccttttta  | gaagagaaaa | 2340 |
| gaatcttgaa  | ttgtatatata | ttattttgct  | ttacagaaaa  | aaatggtttc  | gtaaaaaatt | 2400 |
| tgcctatttt  | gggttaacata | gcacatggag  | ataatcatct  | gaaagtata   | gggcactgcc | 2460 |
| actgctgaat  | cagagcatgc  | ccaatatattg | aggtggctct  | gatttcctgg  | cagctgaact | 2520 |
| cgggtagtcc  | agtggcctag  | ctggtagcac  | atctattccc  | atccagagac  | attctctggc | 2580 |
| aagtgttctc  | agctgaaaa   | tggttgggga  | tgattcttac  | cttggttaatt | aaatgaagct | 2640 |
| acacatttgg  | gtaatctago  | aaatgaagta  | ttttttccct  | cttgccaact  | tgtgtcagag | 2700 |
| ttactctggt  | ctgagtcac   | ttcgtctggg  | gaaaacctat  | ggaacctact  | gcaaaaagat | 2760 |
| tgtccaaaat  | gcctaagaaa  | atactcctct  | gatgcattta  | gccttcaacc  | ctacctgtct | 2820 |
| tgtggaagg   | agaaaaatgt  | tttagtacat  | tataggccca  | gcagctttta  | ttcatgtcca | 2880 |
| ccagctagtt  | gcacagagaa  | tcattgtgtac | ctaactaagg  | atgatctagg  | ataagtaact | 2940 |
| cctgttttat  | attgagtatt  | ttagggaagt  | ctttaaaga   | cttgttttat  | atctataaat | 3000 |
| ctaggttatt  | acaaatacaa  | gaattttgta  | ccttaataaa  | gcctcatttc  | tattttctct | 3060 |
| tcattaatto  | tcactctagt  | cttgtgaaaa  | aaaaaaaaaa  | aaaaa       |            | 3105 |

<210> 87

<211> 2711

<212> DNA

<213> NM\_016028.4| Homo sapiens suppressor of variegation 4-20 homolog 1 (Drosophila) (SUV420H1), transcript variant 2, mRNA

<400> 87  
 ggtgctgcgg ccgcgcgcgc catcttggat tttactctcc atttttctct ggaattatatt 60  
 ttggtgatta attttctggg ggggactggg acgcggggcc cggcggcgcg gccccgcac 120  
 gcagcggccg ggcagcgggg cctgggacgc gccccgagga ggagcggggc ggcgcaggcg 180  
 gagagaacat tgaaagtatt ctctaagcta tttgaagaga gtgactaaat gcacctgggt 240  
 caggctgtct gtgggtatga agtggttggg agaatccaag aacatgggtg tgaatggcag 300  
 gagaaatgga ggcaagtgtt ctaatgacca tcagcagaat caatcaaaat tacagcacac 360  
 ggggaaggac accctgaagg ctggcaaaaa tgcagtcgag aggaggtcga acagatgtaa 420  
 tggttaactcg ggatttgaag gacagagtcg ctatgtacca tcctctggaa tgccgcgcaa 480  
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 atctgacagt ttttctcaca acaaccctgt gagatttagg cctattaaag gaaggcagga 660  
 agaactaaag gaagtaattg aacgttttaa gaaagatgaa cacttggaag aagccttcaa 720  
 atgtttgact tcaggcgaat gggcacggca ctattttctc aacaagaata aaatgcagga 780  
 gaaattattc aaagaacatg tattttatta ttgcaaatg ttgcaactg acagtggatt 840  
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|   |      |
|---|------|
| atatgttcca aggtcatcat atgttttaaa cattttcaag gtgttagaga ctgtgatgat | 1740 |
| gtcgctaagt cctgcaagaa gacaaaagga ctgagtagaa ttaattaga ctctatacat  | 1800 |
| tccagtgcct agccagtttg ttagaaaaga tgatggactt gggaattca tagcttctgg  | 1860 |
| ccttaaggct tccacctttt cattgcttgc tgaccttttt caaaacgaac tgactcagtt | 1920 |
| cagcagacca ccagtaccag actcagaatt gtgatagagg agcattttga acagtgccgt | 1980 |
| atttgtacat gctgtatttg ctactcoaga aagtaggagt aaagatggaa aggagaaaga | 2040 |
| agcaacctct gagattccag tgggtgtgtg gggcaagatc tgatggaaac tgaaaaagag | 2100 |
| aacgaagact aaacaaagag aaaggaaaga gaagaaaccc taaatgggca aaggaaagca | 2160 |
| catcctgttt gcggagcttt gaaatatttg aaccatttct aattgctctc gttttctctg | 2220 |
| gtaacaccag ttttctgtag ttgccactaa agcagtagac tcttgagtct cacttgcttc | 2280 |
| tgagagagac agaagttaga aagttttgac ttggcgattc cgaagtatg cctttgttgg  | 2340 |
| cacttaaatg tccagtgaga cttcttggca ccttagagcc ctctgagata ctgattattt | 2400 |
| taggttcttc tccctacttt cagatgtttt cagcccaaca ctgggtgctc tcttccacta | 2460 |
| cagagaatcc tgaagaaaaa ggaaggtgtt tcccatgatg gtgaatgtca ctgccatgaa | 2520 |
| ttcctgaatc tacctgtctg tgggagtcag agtccaagca taaccctgtg agcataaaag | 2580 |
| cagcgtgtga gccctatttc agtcttttct gttaatgtcc agagtgaaca acaagagtta | 2640 |
| gtcaatcatt aactgttgac tgttgattct cataataaat gcagcataac gacaaaaaaa | 2700 |
| aaaaaaaaa a   | 2711 |

<210> 88

<211> 2977

<212> DNA

<213> NM\_022105.2| Homo sapiens death associated transcription factor 1 (DAF1), transcript variant 1, mRNA

|   |     |
|---|-----|
| <400> 88  |     |
| gggagcggga gggcaggcgc accggaggcc gccctcagc acctctcgcg acagcaagag  | 60  |
| agcgcgagag cgcgagccga tgaccaatga agcgccccgc cgagggggcg ggcggcagcg | 120 |
| cctcccgga cgcgggaacc tcagcttccg tacttgcgca gaactccctc cgcggcgacc  | 180 |
| acgcactacg gggtggcgcc agagtcaaaa ggcgtcggcc ctctggcaag atggctgctg | 240 |

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| cgaggcggtt | ggagcgcgga | aatctggaac | cgggatggcg | acgtctacac | tgagtcggag | 300  |
| gcgaaggagc | ttactccacg | ggaacagcct | ctagataaat | tgagttgttg | aaaatacgaa | 360  |
| gcctgttact | cgtgaacagt | ggctgacaac | agtgtgtgtg | tgagcctggc | tgtctgcttg | 420  |
| gacccagagg | tttcgtctcg | cagggttttt | ggttgatttt | aggatttcag | ggaaaagtgt | 480  |
| ccaagcttcc | agtgttgagg | caggtatgga | cgacaaaggc | gacccagaca | atgaggaggc | 540  |
| acctaaaggc | atcaaaccca | ccagcaaaag | gttcaggaaa | acatgggggt | ttcgaaggac | 600  |
| cactatcgcc | aagcgagagg | gcgcagggga | cgcgagggct | gacccactgg | agccgcccac | 660  |
| cccacagcag | cagctggggc | tgtccctgcg | gcgcagtggt | aggcagccca | agcgcactga | 720  |
| gcgcgtggag | cagttcctga | ccattgcgcg | gcgcgcggcg | aggaggagca | tgctgtcttc | 780  |
| cctggaggat | tctggtgagc | ccacgtcctg | ccccgccaca | gacgcgcaga | cagcctccga | 840  |
| gggcagcgtg | gaaagcgctt | ctgagaccag | aagcgccccc | cagtctgctt | ccacagctgt | 900  |
| gaaggaaacg | ccagcctctt | ctgaaaaggt | gaaaggaggg | gatgaccacg | atgacacctc | 960  |
| cgatagtgcg | agcgatggcc | tgaccttgaa | agagcttcag | aatcgccctc | gcaggaaagc | 1020 |
| ggaacaggag | cccactgaga | ggccccctga | agggatccag | agtcgcctcg | ggaagaagcg | 1080 |
| ccgggaggag | gggtccgcgc | agactgtggg | ctccgagggc | agtgcactgc | tggagggcgt | 1140 |
| cctgccagct | aagcaggagc | ccgagaaacg | tcaggggggt | gtgtcccagc | ctgggaaaga | 1200 |
| tgacagagag | agtaagtgtg | agggaaaagg | ggctcaggac | atcaaagatg | aggagcctgg | 1260 |
| agacttgggc | cgaccgaagc | ctgaatgtga | gggttacgac | cccaacgccc | tgtattgcat | 1320 |
| ttgccgccag | cctcacaaca | acaggtttat | gatttgctgt | gaccgctgtg | aagaatgggt | 1380 |
| tcattggcat | tgtgtgggca | tttctgagcg | tcgaggggag | cttttgtaaa | ggaatgggga | 1440 |
| agactatatc | tgcccaaaat | gcaccattct | gcaagtgcag | gatgagactc | attcagaaac | 1500 |
| ggcagatcag | caggaaagct | aatggagacc | tgagatgctg | gatggcaccg | attgtacaag | 1560 |
| tataggaaac | atagagcaga | agtctagcga | agaccaaggg | ataaagggtg | gaattgagaa | 1620 |
| agctgcaaat | ccaagtggca | agaagaaaat | caagatcttc | cagcctgtga | tagaggcgcc | 1680 |
| tggtgcctca | aatgtatttg | gccccgggtg | ctgtcacgtg | gcgcagcccc | actcgggtga | 1740 |
| ctgcagtaat | gactgtatcc | tcaaacacgc | cgcagcgaca | atgaagtttc | taagctcagg | 1800 |
| taaaagaacg | aagccaaaag | ctaaagaaaa | gatgaagatg | aagccagaga | agcccagctc | 1860 |
| tccgaaatgc | ggtgctcagg | caggtattaa | aatctcttct | gtgcacaaga | gaccagctcc | 1920 |
| agaaaaaaaa | gagaccacag | tgaagaaggc | agtgggtgtc | cctgcgcgga | gtgaagcact | 1980 |

|  |      |
|--|------|
| cggaaggaa gcagcttggt agagcagcac gccgtcgtgg gcgagcgatc acaattacaa   | 2040 |
| tgcagtaaaag ccagaaaaga ctgctgctcc ctccgctga ctgttgataaat atgtatgta | 2100 |
| tcacctagggt gttggcctcc tggaccctcc ccgttcttcc tggatagcca tccccgggc  | 2160 |
| ctgtccagga ctgggagttg cagctttgtg ttaagctgat cacagacacc ggctgcacca  | 2220 |
| tcagcgggaa gcagagccca tgtccaggat gccctctgct gccctgtgtc catccctagt  | 2280 |
| ctgtcaggac ttctctgtcc tgttttccaa agctgtaaac ctcaactgggt aacgttcacc | 2340 |
| ttaatgattg attctttaat ctctgttttc actctcaggc tctggtaagt attcgtattc  | 2400 |
| tcttcatccc agtctgattg catagccaca ctgccggcca cggccatcc acccctgtct   | 2460 |
| gcacatgagt tgttctgaca acagcgtctg atacgcttca gtttttccac attgtccacg  | 2520 |
| gccagcacat gaaagcatca cttctttttt atgttggtgg aatctttgca agttagtgtt  | 2580 |
| gcctctgatt ttcagggtga cttttttttt tgactgggca gataggggat tttttttttt  | 2640 |
| ccatgtccga ttcacacgct acacacccac atgaacacat tcgaacttcg aaggccacac  | 2700 |
| actcctgctt cataggcccc acggtaagtg agttcacacc tagaacactg tctgtaccgc  | 2760 |
| aggacgcgtg ccttggaact ggtattctac atgtgactgg ctttcttgcc ctctctctt   | 2820 |
| gaatgtttag actcttaaga tcctatctct ccccaaatat caaattaatg aaatgaagat  | 2880 |
| atttcaaaac gatctttgaa acctcagatt ctgtggtgca attttaatgt tttctgtgtt  | 2940 |
| ctcagttttc tgcataaaaa ctattttcaa ttcagtc                           | 2977 |

<210> 89

<211> 1047

<212> DNA

<213> NM\_018487.2| Homo sapiens hepatocellular carcinoma-associated antigen 112 (HCA112), mRNA

<400> 89

|  |     |
|--|-----|
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| cagactgtgt ccttgacaat ggaacagcc gacagtgat agatggcccc ggaggcccca  | 120 |
| cagcacacc acatcagatg gcacatccac caggagtctg ccttgcccaa gctcctgtc  | 180 |
| acctgtgtct ctgcgtctgc gccccgggcc acccaggcca ggggcagag ccggctgtg  | 240 |
| gtggcctcgt ggggtgatga gatcgtgtg gggatcttga gtgcagtcct aggaggattt | 300 |



|  |      |
|--|------|
| ttctacatcc gcgactacac cctcctcgtc acctcgggag ctgccatctg gacaggggct  | 360  |
| gtggctgtgc tggctggagc tgcctccttc atttacgaga aacgggggtg tacatactgg  | 420  |
| gccctgctga ggactctgct aacgctggca gctttctcca cagccatcgc tgcctcaaaa  | 480  |
| ctttggaatg aagatttcgc atatggctac tcttattaca acagtgcctg ccgcatctcc  | 540  |
| agctcgagtg actggaacac tccagcccc actcagagtc cagaagaagt cagaaggcta   | 600  |
| caactatgta cctccttcac ggacatgctg aaggccttgt tcagaacctc tcaggccatg  | 660  |
| ctcttgggtg tctggattct getgctctg gcctctctga cccctctgtg gctgactgct   | 720  |
| tggagaatgt tcccaaccaa agggaaaaga gaccagaagg aaatgttga agtgagtgga   | 780  |
| atctagccat gcctctcctg attattagtgc cctggtgctt ctgcaccggg cgtccctgca | 840  |
| tctgactgct ggaagaagaa ccagactgag gaaaagaggc tcttcaacag cccagttat   | 900  |
| cctggcccca tgaccgtggc cacagccctg ctccagcagc acttgcccat tccttacacc  | 960  |
| ccttccccat cctgctccgc ttcattgtcc ctcttgagta gtcattgtat aataaactct  | 1020 |
| catgttattg tcccaggaa aaaaaaa                                       | 1047 |

<210> 90

<211> 2785

<212> DNA

<213> NM\_014454.1| Homo sapiens sestrin 1 (SESN1), mRNA

|   |     |
|---|-----|
| <400> 90  |     |
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| attcaactac tagggagaca gcattggaaa acattaggca aaccattttg aggaaaaccg | 120 |
| agtatctctg ttcggtgaaa gaaacacctc atcgccatc agacgggctt tcaataaccg  | 180 |
| agtcctcgga tgggttgaat aagctacttg ctcatctgct tatgctttct aagagggtgc | 240 |
| ccttcaaaga tgtgagagag aaaagtgagt ttattctgaa gacatccag gaacttgga   | 300 |
| ttagaattcc tcgaccacta ggacagggac caagcagatt catccagaa aaggagatcc  | 360 |
| tccaagtggg gagtgaagac gcacagatgc atgctttatt tgcagattct tttgtgctt  | 420 |
| tgggccgttt ggataacatt acgttagtga tggttttcca ccacacaat ttagaaagtt  | 480 |
| tcttaaaaac tcagcactat ctactgcaaa tggatgggcc gttaccctca cattatcgtc | 540 |

|  |      |
|--|------|
| actacattgg aataatggct gcggcaagac atcagtgctc ctacttagtg aacctgcatg  | 600  |
| taaatgattt ccttcattgt ggtggggacc ccaagtggct caatggttta gagaatgctc  | 660  |
| ctcaaaaact acagaattta ggagaactta acaaagtgtt agcccataga ccttggettta | 720  |
| ttaccaaaaga acacattgag ggacttttaa aagctgaaga gcacagctgg tcccttgcg  | 780  |
| aattgggtaca tgcagtagtt ttaactcacac actatcattc tcttgctca ttcacattcg | 840  |
| gctgtggaat cagtcacaga attcattgtg atgggtggca cacattcaga cctccttctg  | 900  |
| ttagcaacta ctgcattctgt gacattacaa atggcaatca cagtggtgat gagatgccg  | 960  |
| tcaactcagc agaaaaatgtt tctgtaagtg attctttctt tgagggtgaa gccctcatgg | 1020 |
| aaaagatgag gcagttacag gaatgtcgag atgaagaaga ggcaagtcag gaagagatgg  | 1080 |
| cttcacgttt tgaaatagaa aaaagagaga gtatgtttgt cttctcttca gatgatgaag  | 1140 |
| aagttacacc agcaagagct gtatctcgtc attttgaggga tactagttat ggctataaag | 1200 |
| atttctctag acatgggatg catgttccaa catttcgtgt ccaggactat tgctgggaag  | 1260 |
| atcatggtta ttcttttgta aatgccttt atccagatgt gggacagttg attgatgaaa   | 1320 |
| aatttcacat tgcttacaat cttacttata atacaatggc aatgcacaaa gatgttgata  | 1380 |
| cctcaatgct tagacgggca atttggaact atattcactg catgtttgga ataagatatg  | 1440 |
| atgattatga ctatggtgaa attaacccagc tattggatcg tagctttaaa gtttatatca | 1500 |
| aaactgttgt ttgcactcct gaaaagggtta ccaaaagaat gtatgatagc ttctggaggc | 1560 |
| agttcaagca ctctgagaag gttcatgtta atctgcttct tatagaagct aggatgcaag  | 1620 |
| cagaactcct ttatgctctg agagccatta cccgctatat gacctgatgc ctttccttca  | 1680 |
| ttaaagatga ttctggaatg atcagcagat atagtctaca agggggaagg tactaagccc  | 1740 |
| caggaccaat ggtagacaaa ataattcaga aatccattgt gccatgatto ctttagtttc  | 1800 |
| tgctattttt ctgtgaaaaa ccactgctgg cacaagcagt gactgtttgg cagcttcaag  | 1860 |
| tttagagctg tgaagacagg ctgccattca cagtattttg ctttttgaca gtacaagatg  | 1920 |
| ctgtgtaact gttttaatac agcaaatagt aactctccaa atcctgttgc ttttatgtta  | 1980 |
| aataagataa caagaattgg agcatgcaaa gaatgggact tggataatga cttaagcttt  | 2040 |
| atatgtaaag aatttttaga gatcttggtg ctgctattcc tgctggagga atgaatagat  | 2100 |
| ggctgtttca gtttaagctat tagtaataaa agtgaacatt gctactatct gagectacat | 2160 |
| acataacttg tgtgatttca aattaaactt gcattatgtg ttaattttct tgcactctaaa | 2220 |
| aaagcataga attcctactc acacagctca gcaacaacca ttttgatggt aacagttaat  | 2280 |

|   |      |
|---|------|
| ttctttcatt agtttttttaa attcaggggtt ctggatatta aattaaaaatg gcattctttaa | 2340 |
| agatttttctt caaaaagcaa tcctaaatga aagtgtgtaa attataagaa gctggcgatc    | 2400 |
| ttttgatatg ctgtttcaca ggatcctgac actggagggc agctgtcttg tgcattactt     | 2460 |
| gtgttccag caccaaaagt gtgggacatg ttgctgtaga ctgctgcga gtctgggtg        | 2520 |
| cattcagtc ctctgcctct gcctgcctcc tggtocccac tttaaaggct gtgcagctcc      | 2580 |
| ttaataata aagctggaaa atatttttag tgggtttatc aaatttgatt tacaaaaacg      | 2640 |
| ctaactttgt ttgaaatgca aacagggttg aaaatatgta ttaagtactt tgtattctgg     | 2700 |
| aagcgtgaat tgcttttgaa gtctgtcagt attactggta tttttaata aagaagaatt      | 2760 |
| tttctccaaa aaaaaaaaaa aaaaa   | 2785 |

<210> 91

<211> 3802

<212> DNA

<213> NM\_017763.1| Homo sapiens hypothetical protein FLJ20315 (FLJ20315), mRNA

|  |     |
|--|-----|
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| aagcataaat gttcttttcc tccatttgtc tggatctgag aacctgcatt tggattatgc  | 120 |
| tagtggaagc agtatgtatg gttgaagtgc attgtctgag ctggtagcat gagtgggtgc  | 180 |
| caccagctgc agctggctgc cctctggccc tggctgtgta tggctaccct gcaggcaggc  | 240 |
| tttgacgca caggactggt actggcagca gcggtggagt ctgaaagatc agcagaacag   | 300 |
| aaagctgtta tcagagtgat cccttgaaa atggacccca caggaaaact gaatctcact   | 360 |
| ttggaagggtg tgtttgtctg tgttctgtaa ataactccag cagaaggaaa attaatgcag | 420 |
| tcccaccac tgtacctgtg caatgccagt gatgacgaca atctggagcc tggattcatc   | 480 |
| agcatcgtca agctggagag tectcgacgg gcccccgcc cctgcctgtc actggctagc   | 540 |
| aaggctcgga tggcgggtga gcgaggagcc agtgtgtgcc tctttgacat cactgaggat  | 600 |
| cgagctgctg ctgagcagct gcagcagccg ctggggctga cctggccagt ggtgttgatc  | 660 |
| tggggtaatg acgctgagaa gctgatggag tttgtgtaca agaacaaaa ggcccatgtg   | 720 |
| aggattgagc tgaaggagcc cccggcctgc ccagattatg atgtgtggat cctaattgaca | 780 |

|  |      |
|--|------|
| gtggtgggca ccatctttgt gatcatcctg gcttcgggtgc tgcgcacccg gtgccgcccc | 840  |
| cgccacagca ggccggatcc gcttcagcag agaacagcct gggccatcag ccagctggcc  | 900  |
| accaggaggt accaggccag ctgcaggcag gcccggggtg agtggccaga ctcaggggagc | 960  |
| agctgcagct cagccccctgt gtgtgccatc tgtctggagg agttctctga ggggcaggag | 1020 |
| ctacgggtca tttcctgcct ccattgagttc catcgtaact gtgtggaccc ctgggttacc | 1080 |
| cagcatcgga cttgccccct ctgcgtgttc aacatcacag agggagattc attttcccag  | 1140 |
| tccttgggac cctctcgatc ttaccaagaa ccaggtcgaa gactccacct cattcgccag  | 1200 |
| catcccgccc atgcccacta ccacctccct gctgcctacc tgttgggccc ttcccgaggt  | 1260 |
| gcagtggctc ggccccccag acctgtgccc ttcttgcctc ccaggagacc aggcattggc  | 1320 |
| cctcggcctc accgcttccc cagagctgca catcccccgg ctccaggaga gcagcagcgc  | 1380 |
| ctggcaggag cccagcacco ctatgcacaa ggctggggaa tgagccacct ccaatccacc  | 1440 |
| tcacagcacc ctgctgcttg ccagtgccc ctacgcccgg ccaggccccc tgacagcagt   | 1500 |
| ggatctggag aaagctattg cacagaacgc agtgggtacc tggcagatgg gccagccagt  | 1560 |
| gactccagct cagggccctg tcattgctct tcagtgact ctgtgtgcaa ctgcacggac   | 1620 |
| atcagcctac aggggggtca tggcagcagt tctactttct gcagctccct aagcagtgac  | 1680 |
| tttgaccccc tagtgtactg cagccctaaa ggggatcccc agcagatgga catgcagcct  | 1740 |
| agtgtgacct ctgggcctcg ttcttgggac tcggtggtgc ccacaggga aaccagggt    | 1800 |
| tccagccatg tccactacca ccgccaccgg caccaccact acaaaaagcg gtccagtg    | 1860 |
| catggcagga agcctggccc agaaaccgga gtccccagct ccaggccctc tattctctcg  | 1920 |
| acacagcccc agccagagcc accttctcct gatcagcaag tcaccggatc caactcagca  | 1980 |
| gccccctcgg ggcggtctc taaccacag tggcccagg ccctccctga gccagccct      | 2040 |
| ggcccagttg acgcctccag catctgcccc agtaccagca gtctgttcaa cttgcaaaaa  | 2100 |
| tccagcctct ctgcccagca cccacagagg aaaaggcggg ggggtccctc cagagccacc  | 2160 |
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|  |      |
|--|------|
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| aggcaaccag ctgctgcctg tggcgtgtgt gggctggatc cctgaaggc tgagtttttg   | 2820 |
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| aaggtagaaa aggcagaatt acagctgagc ggggacaaca aagagttctt ctctgggaaa  | 3360 |
| agttttgtct tagagcaagg atggaaaatg gggacaacaa aggaaaagca aagtgtgacc  | 3420 |
| cttggtgttg gacagcccag aggccagct cccagctata agccatacag gccagggacc   | 3480 |
| cacaggagag tggattagag cacaagtctg gcctcactga gtggacaaga gctgatgggc  | 3540 |
| ctcatcaggg tgacattcac ccagggcag cctgaccact cttggccctc caggcattat   | 3600 |
| cccatttga atgtgaatgt ggtggcaaag tgggcagagg accccacctg ggaacctttt   | 3660 |
| tcctcagtt agtggggaga ctagcaccta ggtaccaca tgggtattta tatctgaacc    | 3720 |
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| ccacaaaaaa aaaaaaaaaa aa   | 3802 |

<210> 92

<211> 1236

<212> DNA

<213> NM\_017918.3| Homo sapiens hypothetical protein FLJ20647 (FLJ20647), mRNA

<400> 92

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| cgacccttgg caccctgggc ccagcgcgcg cgtggccgct gccgcctccg cccaggttt  | 180  |
| tgcgtgtgaa gctgtgtgga aatgtgaaat actaccagtc acaccattat agtaccgtgg | 240  |
| tgccacctga tgaataaaca gttatttata gacatggcct tccttggta acacttacct  | 300  |
| tgccatctag aaaagaacgt tgtcaattcg tagtcaaacc aatgttgta acagtgggt   | 360  |
| cattccttca ggacctacaa aatgaagata agggatcaaa aactgcagcc atcttcacag | 420  |
| cagatggcaa catgatttca gcttctacct tgatggatat ttgctaagat aatgatttta | 480  |
| aacttgtcat taataaaata gcatatgatg tgcagtgtcc aaagagagaa aaaccaagta | 540  |
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| tgaaggaaca gctgcagccc cttgaacagg tgaaagctgg aatagaagct cattcggaag | 720  |
| ccaaaaccag tggactcctg tgggctggat tggcactgct gtcatttcag ggtggggcac | 780  |
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| tcacatttgc aaattctatg gtcttttttg catactttat agtcaactcg caggattata | 900  |
| cttactcagc tgttaagagt aggcatttcc ttcagtcttc ccacaagaaa tcaaagcaac | 960  |
| agcactttga tgtgcagcaa tacaacaagt taaaagaaga ccttgctaag gctaaagaat | 1020 |
| ccctgaaaca ggcgcgctcat tctctctgtt tgcaaagca agtagaagaa ctcaatgaaa | 1080 |
| agaattaatc ttacagtttt aaatgtcgtc agattttcca ttatgtattg attttgcaac | 1140 |
| ttaggatgtt tttgagtcgc atggttcatt ttgattgttt aatccttgtt attaaattct | 1200 |
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<210> 93

<211> 2096

<212> DNA

<213> NM\_024792.1| Homo sapiens membrane protein expressed in epithelial-like lung adenocarcinoma (CT120), mRNA

<400> 93

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|---|----|

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|-------------|------------|------------|------------|-------------|-------------|------|
| ggggcgcgct  | cttcttcccg | gggctcttcg | cgtctgcac  | ctggcgctg   | cgcgcctccc  | 120  |
| agcccgatg   | gagccgcacc | gactgcgtga | tgatcagcac | caggctgggt  | tctcgggtgc  | 180  |
| acgcgctgct  | ggccaccggo | tcggggatcg | tcctcattcg | ctcctgcgac  | gacgtgatca  | 240  |
| cggcgaggca  | ctggcttgcc | cggaatatg  | tgtggtttct | gattccatac  | atgatctatg  | 300  |
| actcgtacgc  | catgtacctc | tgtgaatgg  | gccgaaccag | agaccagaac  | cgtgcgcctt  | 360  |
| ccctcactct  | tggaaacttc | ctaagtggaa | accgcctcat | gatcacacat  | catgcggtea  | 420  |
| ttctctttgt  | ccttgtgcca | gtcgcacaga | ggctccgggg | agacctggg   | gaattctttg  | 480  |
| tcggctgcat  | cttcacggca | gaactgagca | ctcgtttgt  | gtcgtgggg   | agggttctga  | 540  |
| ttcagctaaa  | gcagcagcac | accctctctg | acaaggtgaa | tggaaacctc  | acgtgggcca  | 600  |
| ccttcctttc  | ctgcgggac  | cttctcttcc | ccttcattga | ctgggtctat  | ggcgccagc   | 660  |
| agggaactaag | cctgctccaa | gtacccttca | gcacccatt  | ctactgcaac  | gtggccaatg  | 720  |
| ccttcctcgt  | agctcctcag | atctactgg  | tctgtctgct | gtcgagggaag | gcagtcgggc  | 780  |
| tctttgacac  | tcccgaagcc | aaaaggatg  | gctaaatgct | cctggggagtc | aggcgagccc  | 840  |
| tcacaccagc  | tgcctctccc | actcagcatt | ccatggacca | aattgtgccc  | tgggtagcct  | 900  |
| cagactttgg  | gtattgataa | gccgatggat | ttgagttttt | ctaaagaata  | ttcatattac  | 960  |
| ctcctctctc  | taacttgccc | tatttgcaaa | agcacttttg | tagtaacaac  | tattgggtcc  | 1020 |
| tgtcagacct  | ccacggacag | caaagtgggt | ttaatgcaag | cccaaggatc  | cttcttaagg  | 1080 |
| tcttatctca  | agagctctgg | gaggtggaag | catgggggtg | gatcggtgga  | ccagggtgggt | 1140 |
| aagtgtctgc  | acatctgcct | gtccctgtat | cagcggtcac | ccaccttcca  | aaccactcag  | 1200 |
| gacagtaccc  | tgggcactgg | gcccgagaaa | gcaagggatg | acttggtctt  | tggaaagtaat | 1260 |
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| tagataaccc  | attggttctt | tgcctcatcc | tctcatccat | gggtcagagt  | tgaattctta  | 1380 |
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| tgacttgcta  | agctgcagac | tgacaaactt | gtgagcttac | tgacgtcagt  | cacagaggct  | 1560 |
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| ctcataaaac  | tacagggaag | cgtgaaatga | tggctttggt | agctgtttac  | tgggtaaccc  | 1680 |
| cactgtgaca  | ctgtcctttt | catgtgatgt | ggaacacctc | ttctgtctcc  | caaaccatga  | 1740 |
| aatgtgtcat  | ctagactgca | gagtaactga | gtgctttgcc | tccgatatg   | ccagagcttg  | 1800 |

|  |      |
|--|------|
| tggtccaaag cccattcctg tgtgtccgtc ctgccattta gccacagaag gctgcggagt  | 1860 |
| gaggcggcag ctagcctggc cagtggctgt cccgtggacc gacacctgcg cccccttctg  | 1920 |
| caagcaggat tttctgggtg caaacactcat tcatcattcc cgatcaacta ggatgaattt | 1980 |
| aagactgtgc taccatgtgt tctcaagtgg tagtttaaaa agtggatttt taaagtgcct  | 2040 |
| ttcaattgtc tgtgaacgtc taaaggactg atttgtctca aaaaaaaaaa aaaaaa      | 2096 |

<210> 94

<211> 4372

<212> DNA

<213> NM\_014314.2| Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 (DDX58), mRNA

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| cctgctttcc ccgtcgcgcc cgcctcctcc ctaccgggct ttaaagctag tgaggcacag  | 120  |
| cctgcgggga acgtagctag ctgcaagcag aggccggcat gaccaccgag cagcgacgca  | 180  |
| gcctgcaagc cttccaggat tatatccgga agaccctgga cctacctac atcctgagct   | 240  |
| acatggcccc ctggttttag gaggaagagg tgcaagtatat tcaggctgag aaaaacaaca | 300  |
| agggcccaat ggaggctgcc acacttttcc tcaagttcct gttggagctc caggaggaag  | 360  |
| gctggttccg tggctttttg gatgccctag accatgcagg ttattctgga ctttatgaag  | 420  |
| ccattgaaag ttgggatttc aaaaaaattg aaaagttgga ggagtataga ttacttttaa  | 480  |
| aacgtttaca accagaattt aaaaccagaa ttatcccaac cgatatcatt tctgatctgt  | 540  |
| ctgaatgttt aattaatcag gaatgtgaag aaattctaca gatttgcctc actaagggga  | 600  |
| tgatggcagg tgcagagaaa ttggtggaat gccttctcag atcagacaag gaaaactggc  | 660  |
| ccaaaacttt gaaacttgct ttggagaaag aaaggaacaa gttcagtga ctgtggattg   | 720  |
| tagagaaagg tataaaagat gttgaacagc aagatcttga ggataagatg gaaacttctg  | 780  |
| acatacagat tttctaccaa gaagatccag aatgccagaa tcttagtgag aattcatgtc  | 840  |
| caccttcaga agtgtctgat acaaaacttg acagccattt taaaccaaga aattaccaat  | 900  |
| tagagcttgc tttgctgtct atgaaaggaa aaaacacaat aatatgtgct cctacaggtt  | 960  |
| gtgaaaaaac ctttgtttca ctgcttatat gtgaacatca tcttaaaaaa tccccacaag  | 1020 |



|            |            |             |             |            |            |      |
|------------|------------|-------------|-------------|------------|------------|------|
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| ctgtattctc | aaaatacttt | gaaagacatg  | ggtatagagt  | tacaggcatt | tctggagcaa | 1140 |
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| gcaagctgtg | tgcttctctt | gatgcgtcag  | tgatagcaac  | agtcaaacac | aatctggagg | 1500 |
| aactggagca | agttgtttat | aagccccaga  | agtttttcag  | gaaagtggaa | tcacggatta | 1560 |
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| aagatgaaga | gagcaggatt | tgtaaagccc  | tgtttttata  | cacttcacat | ttgcggaaat | 1800 |
| ataatgatgc | cctcattatc | agtgagcatg  | cacgaatgaa  | agatgctctg | gattacttga | 1860 |
| aagacttctt | cagcaatgtc | cgagcagcag  | gattcgatga  | gattgagcaa | gatcttactc | 1920 |
| agagatttga | agaaaagctg | caggaaactag | aaagtgttcc  | cagggatccc | agcaatgaga | 1980 |
| atcctaaact | tgaagacctc | tgcttcacat  | tacaagaaga  | gtaccactta | aaccagaga  | 2040 |
| caataacaat | tctctttgtg | aaaaccagag  | cacttggtga  | cgctttaaaa | aattggattg | 2100 |
| aaggaaatcc | taaactcagt | tttctaaaac  | ctggcatatt  | gactggacgt | ggcaaaacaa | 2160 |
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| gtggagatca | caatattctg | attgccacct  | cagttgctga  | tgaaggcatt | gacattgcac | 2280 |
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|  |      |
|--|------|
| ccaagccaaa gcagttttca agttttgaaa aaagagcaaa gatattctgt gcccacaga   | 2760 |
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| gtaaaacaag gataatactg aactgtaagg gttagtggag agtttttaat taaaagaatg  | 4260 |
| tgtgaaaagt acatgacaca gtagtgtcct gataatagtt actagtagta gtattcttac  | 4320 |
| taagacccaa tacaatgga ttattttaac caaaaaaaaa aaaaaaaaaa aa           | 4372 |

<210> 95

<211> 2163

<212> DNA

<213> NM\_015515.3| Homo sapiens keratin 23 (histone deacetylase inducible) (KRT23), transcript variant 1, mRNA

<400> 95

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| gtccggggct gctaacaacg gctacattcc tccccaggg ccaagggaaa tcttgagcgc   | 180  |
| aggccagggt tgtttgggtt tgagggtgtc tgggatgaaa ggcacccctg aagtggaagg  | 240  |
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| cctgatgtcg tgggcccacac ctccgggtta ccagggggag ggagggaaga aactgtcata | 360  |
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| gcccaggagc ttcccagggt ctcccaccgt ccattggcggg gcggggggag cccgcacetc | 720  |
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| cagccccta ctaggcgga atgggaaggc caccatgcag aatctcaacg accgcctggc    | 840  |
| ctcctacctg gagaaggctc gcgcctgga ggaggccaac atgaagctgg aaagccgat    | 900  |
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| aaacatcaca cacctgcagg agcagatagt ggatggtaag atgaccaatg ctccagattat | 1020 |
| tcttctcatt gacaatgcca ggatggcagt ggatgacttc aacctcaagt atgaaaatga  | 1080 |
| acactccttt aagaaagact tggaaattga agtcgagggc ctccgaagga ccttagacaa  | 1140 |
| cctgaccatt gtcacaacag acctagaaca ggagggtgaa ggaatgagga aagagctcat  | 1200 |
| tctcatgaag aagcaccatg agcaggaaat ggagaagcat catgtgccaa gtgacttcaa  | 1260 |
| tgtcaatgtg aaggtggata caggtcccag ggaagatctg attaaaggctc tggaggatat | 1320 |
| gagacaagaa tatgagctta taataagaa gaagcatcga gacttggaac cttggtataa   | 1380 |

|             |            |            |            |             |             |      |
|-------------|------------|------------|------------|-------------|-------------|------|
| agaacagtct  | gcagccatgt | cccaggaggc | agccagtgca | gccactgtgc  | agagcagaca  | 1440 |
| agggtacatc  | cacgaactga | agcgcacatt | ccaggccctg | gagattgacc  | tgacagacaca | 1500 |
| gtacagcacg  | aaatctgctt | tggaaaacat | gttatccgag | acccagtctc  | ggtactcctg  | 1560 |
| caagctccag  | gacatgcaag | agatcatctc | ccactatgag | gaggaactga  | cgcagctacg  | 1620 |
| ccatgaactg  | gagcggcaga | acaatgaata | ccaagtgtgc | ctgggcatca  | aaaccacact  | 1680 |
| ggagaaggaa  | atcaccacgt | accgacggct | cctggaggga | gagagtgaag  | ggacacggga  | 1740 |
| agaatcaaag  | tcgagcatga | aagtgtctgc | aactccaaag | atcaaggcca  | taaccaggga  | 1800 |
| gaccatcaac  | ggaagattag | ttctttgtca | agtgaatgaa | atccaaaagc  | acgcatgaga  | 1860 |
| ccaatgaaag  | tttcgcctg  | ttgtaaaatc | tattttcccc | caaggaaagt  | ccttgccacg  | 1920 |
| acaccagtga  | gtgagttcta | aaagataccc | ttggaattat | cagactcaga  | aactttttat  | 1980 |
| ttttttttct  | gtaacagtct | caccagactt | ctcataatgc | tcttaataata | ttgcactttt  | 2040 |
| ctaatacaaag | tgcgagttta | tgagggtaaa | gctctacttt | cctactgcag  | ccttcagatt  | 2100 |
| ctcatcattt  | tgcatctatt | ttgtagccaa | taaaactccg | cactagcaaa  | aaaaaaaaaa  | 2160 |
| aaa         |            |            |            |             |             | 2163 |

<210> 96

<211> 2881

<212> DNA

<213> NM\_007210.2| Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 6 (GalNAc-T6) (GALNT6), mRNA

|             |             |            |     |
|-------------|-------------|------------|-----|
| <400> 96    |             |            |     |
| atgaggctcc  | tcgcgacagc  | ccacatgccc |     |
| ctgcgccttg  | ccatggtggg  | ctgcgccttt | 60  |
| gtgctcttcc  | tcttctcctc  | gcatagggat |     |
| gtgagcagca  | gagaggaggc  | cacagagaag | 120 |
| ccgtggctga  | agtcctctgt  | gagccggaag |     |
| gatcacgtcc  | tggacctcat  | gctggaggcc | 180 |
| atgaacaacc  | ttagagattc  | aatgcccaag |     |
| ctccaaatca  | gggctccaga  | agcccagcag | 240 |
| actctgtttc  | ccataaacca  | gtcctgcctc |     |
| cctgggttct  | atacccacag  | tgaactgaag | 300 |
| cccttctggg  | aacggccacc  | acaggacccc |     |
| aatgccccctg | gggcagatgg  | aaaagcattt | 360 |
| cagaagagca  | agtggaaccc  | cctggagacc |     |
| caggaaaaag  | aagaaggcta  | taagaagcac | 420 |
| tgtttcaatg  | cctttgccag  | cgaccggatc |     |
| tccttgccaga | ggctccctggg | gccagacacc | 480 |

|   |      |
|---|------|
| cgaccacctg agtgtgtgga ccagaagttc cggcgctgcc cccactggc caccaccagc    | 540  |
| gtgatcattg tgttccacaa cgaagcctgg tccacactgc tgcgaacagt gtacagcgtc   | 600  |
| ctacacacca cccctgccat cttgtctcaag gagatcatac tgggtggatga tgccagcaca | 660  |
| gaggagcacc taaaggagaa gctggagcag tacgtgaagc agctgcaggt ggtgagggtg   | 720  |
| gtgcggcagg aggagcggaa ggggttgatc accgcccggc tgetgggggc cagcgtggca   | 780  |
| caggcggagg tgetcacgtt cctggatgcc cactgtgagt gcttccacgg ctggctggag   | 840  |
| cccctcctgg ctccaatcgc tgaggacaag acagtgggtg tgagcccaga catcgtcacc   | 900  |
| atcgacctta atacttttga gttcgccaag cccgtccaga ggggcagagt ccatagccga   | 960  |
| ggcaactttg actggagcct gaccttcggc tgggaaacac ttctccaca tgagaagcag    | 1020 |
| aggcgcaagg atgaaacata ccccatcaaa tccccgacgt ttgctgggtg cctcttctcc   | 1080 |
| atcccaagt cctactttga gcacatcggg acctatgata atcagatgga gatctgggga    | 1140 |
| ggggagaacg tggaaatgtc cttccgggtg tggcagtgtg ggggccagct ggagatcgc    | 1200 |
| ccctgctctg tcgtaggcca tgtgttccgg accaagagcc cccacacctt ccccaagggc   | 1260 |
| actagtgtca ttgctcgcaa tcaagtgcgc ctggcagagg tctggatgga cagctacaag   | 1320 |
| aagattttct ataggagaaa tctgcaggca gcaaagatgg ccaaagagaa atccttcggg   | 1380 |
| gacatttcgg aacgactgca gctgagggaa caactgcact gtcacaacct ttctcggtac   | 1440 |
| ctgcacaatg totaccocaga gatgtttgtt cctgacctga cggccacctt ctatgggtgc  | 1500 |
| atcaagaacc tcggcaccaa ccaatgcctg gatgtgggtg agaacaaccg cgggggggag   | 1560 |
| cccctcatca tgtactcctg ccacggcctt ggcggaacc agtactttga gtacacaact    | 1620 |
| cagagggacc ttccgccaaa catcgcaaag cagctgtgtc tacatgtcag caagggtgct   | 1680 |
| ctgggccttg ggagctgtca cttcaactggc aagaatagcc aggtccccaa ggacgaggaa  | 1740 |
| tgggaatttg cccaggatca gctcatcagg aactcaggat ctgggtacctg cctgacatcc  | 1800 |
| caggacaaaa agccagccat ggccccctgc aatcccagtg acccccacat gttgtggctc   | 1860 |
| tttgtctagg acccagatca tccccagaga gagccccac aagctcctca ggaacacagga   | 1920 |
| ttgctgatgt ctgggaacct gatcacagc ttctctggag gccgtaaaga tggattttcta   | 1980 |
| aacccactgg ttggcaaggc aggaccttcc taatccttgc aacaacattg ggccatttt    | 2040 |
| ctttccttca caccgatgga agagaccatt aggacatata tttagcctag cgttttctcg   | 2100 |
| ttctagaaat agaggctccc aaagtaggga aggcagctgg gggagggttc agggcagcaa   | 2160 |

|             |            |            |            |             |            |      |
|-------------|------------|------------|------------|-------------|------------|------|
| tgtgtgagttc | aagaaaagta | cttcagggtg | ggcacagtgg | ctcatgcctg  | aaatcctagc | 2220 |
| actttgggaa  | gacaatgttg | gagaatggct | tgagcccagg | agtccaagac  | cggcctgagc | 2280 |
| aacatagtag  | ggatcccatc | tctacgccca | ccctccccc  | ggcaaaaaa   | aaagctgggt | 2340 |
| atggtggctt  | atgcctgtag | tcgcagctac | tcagaaggct | gaggtgggag  | gattgcttgt | 2400 |
| tccccggagg  | ttgaagctac | agtgagcctt | gattgtgtca | ctgcactcca  | gcctgggcaa | 2460 |
| caggtaagac  | tctgtctcaa | aaaaaaaaa  | aaaaagaaga | agaaaagtac  | ttctacagcc | 2520 |
| atgtcctatt  | ccttgatcat | ccaaagcacc | tcgagagtcc | agtgaaatga  | tatattctgg | 2580 |
| ctgggcacag  | tggctcacac | ctgtaatcct | agcacttttg | gaggccaagg  | cagggtggac | 2640 |
| acctgaggtc  | agaagtttga | aaccagcctg | gactacatgg | tgaaactcca  | tctctactaa | 2700 |
| aagtacaaaa  | attagctggg | catgatggca | cgcacctgca | gtcccagcta  | cttggggagg | 2760 |
| tgaggcagga  | gaatcactcg | aaccaggagg | gcagaggttg | cagtgaagcca | agacagcacc | 2820 |
| attgcacccc  | agcctgagca | acaagagcga | aactccatct | caggaaaaaa  | aaaaaaaaaa | 2880 |
| a           |            |            |            |             |            | 2881 |

<210> 97

<211> 1930

<212> DNA

<213> NM\_020183.3| Homo sapiens aryl hydrocarbon receptor nuclear translocator-like 2 (ARNTL2), mRNA

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|------------|-------------|------------|------------|------------|-------------|-----|
| <400> 97   |             |            |            |            |             |     |
| gaccaagtgg | ctcctgcgat  | ggcggcggaa | gaggaggctg | cggcgggagg | taaagtgttg  | 60  |
| agagaggaga | accagtgcat  | tgctcctgtg | gtttccagcc | gcgtgagtcc | agggacaaga  | 120 |
| ccaacagcta | tggggctctt  | cagctcacac | atgacagagt | ttccacgaaa | acgcaaaagga | 180 |
| agtgattcag | accatcccca  | gtcaggaatc | atgacagaaa | aagtgggtga | aaagctttct  | 240 |
| cagaateccc | ttacctatct  | tctttcaaca | aggatagaaa | tatcagcctc | cagtggcagc  | 300 |
| agagtgaag  | atggtagaaca | ccaagttaaa | atgaaggcct | tcagagaagc | tcatagccaa  | 360 |
| actgaaaagc | ggaggagaga  | taaaatgaat | aacctgattg | aagaactgtc | tgcaatgac   | 420 |
| cctcagtgca | accccatggc  | gcgtaaactg | gacaaactta | cagttttaag | aatggctggt  | 480 |
| caacacttga | gatcttttaa  | aggcttgaca | aattcttatg | tgggaagtaa | ttatagacca  | 540 |

|   |      |
|---|------|
| tcattttcttc aggataatga gctcagacat ttaatcctta agactgcaga aggccttctta | 600  |
| tttgtggttg gatgtgaaag agggaaaatt ctcttcgttt ctaagtcagt ctccaaaata   | 660  |
| cttaattatg atcaggctag tttgactgga caaagcttat ttgacttctt acatccaaaa   | 720  |
| gatgttgcca aagtaaagga acaactttct tcttttgata ttccaccaag agaaaagcta   | 780  |
| atagatgcca aaactggttt gcaagttcac agtaatctcc acgctggaag gacacgtgtg   | 840  |
| tattctggct caagacgato tttttctgt cggaataaga gttgtaaaat ctctgtcaaa    | 900  |
| gaagagcatg gatgcttacc caactcaaag aagaaagagc acagaaaatt ctatactatc   | 960  |
| cattgcactg gttacttgag aagctggcct ccaaattatg ttggaatgga agaagaaagg   | 1020 |
| aacagtaaga aagacaacag taattttacc tgccttgttg ccattggaag attacagcca   | 1080 |
| tatatgttgc cacagaacag tggagagatt aatgtgaaac caactgaatt tatacccg     | 1140 |
| tttgactgga atggaaaatt tgtctatgta gatcaaaagg caacagcgat ttaggatata   | 1200 |
| ctgcctcagg aacttttggg aacttcttgt tatgaatatt ttcaccaaga tgaccacaat   | 1260 |
| aatttgactg acaagcaca agcagttcta cagagtaagg agaaaatact tacagattcc    | 1320 |
| tacaaattca gagcaaaaga tggctctttt gtaactttaa aaagccaatg gtttagtttc   | 1380 |
| acaaatcctt ggacaaaaga actggaatat attgtatctg tcaacacttt agttttggga   | 1440 |
| catagtggc ctggagaagc atcattttta ccttgtagct ctcaatcacc agaagaatcc    | 1500 |
| tctagacagt cctgtatgag tgtacctgga atgtctactg gaacagtact tggctgtggt   | 1560 |
| agtattggaa cagatattgc aaatgaaatt ctggatttac agaggttaca gtcttcttca   | 1620 |
| taccttgatg attcgagtcc aacagggtta atgaaagata ctcatactgt aaactgcagg   | 1680 |
| agtatgtcaa ataaggagt gttccacca agtccttctg aaatggggga gctagaggct     | 1740 |
| accaggcaaa accagagtag tgtgtgtgtc cacagccatg agccactcct cagtgtggt    | 1800 |
| gcacagtgg atttcgatgc cctatgtgac aatgatgaca cagccatggc tgcatttatg    | 1860 |
| aattacttag aagcagaggg gggcctggga gaccctgggg acttcagtga catccagtgg   | 1920 |
| accctctagc  | 1930 |

<210> 98

<211> 2128

<212> DNA

<213> NM\_014576.2| Homo sapiens apobec-1 complementation factor (ACF), transcript variant 1, mRNA

<400> 98

|   |      |
|---|------|
| tttgatatga cgattagagc ataaccogag tgacacgttg aattcgccat aatcaaggaa   | 60   |
| accttttccg ggtggggatc tctgaaatta ctacagataac agtgcgtgtgc caaaaacctg | 120  |
| tggattttct ctacaaaaat tattgagcaa ccctaattaa cctgattttt tgctgataat   | 180  |
| cactctcaat ggaatcaaat cacaaatccg gggatggatt gagcggcact cagaaggaag   | 240  |
| cagccctccg cgcactggto cagcgcacag gatatagctt ggtccaggaa aatggacaaa   | 300  |
| gaaaaatatg tggccctcca cctgggtggg atgtctgacc cctgaaaagg ggctgtgaaa   | 360  |
| tttttatttg aaaacttccc cgagaccttt ttgaggatga gcttatacca ttatgtgaaa   | 420  |
| aaatcggtaa aattttatgaa atgagaatga tgatggattt taatggcaac aatagaggat  | 480  |
| atgcatttgt aacattttca aataaagtgg aagccaagaa tgcaatcaag caacttaata   | 540  |
| attatgaaat tagaaatggg cgcctcttag gggtttgtgc cagtgtggac aactgccgat   | 600  |
| tatttgttgg gggcatccca aaaacccaaa agagagaaga aatcttatcg gagatgaaaa   | 660  |
| aggttactga aggtgttgtc gatgtcatcg tctacccaag cgctgcagat aaaacccaaa   | 720  |
| accgaggctt tgccttcgtg gagtatgaga gtcacgcagc agctgccatg gcgaggaggga  | 780  |
| aactgctacc aggaagaatt cagttatggg gacatggatg tgcaagtacg tgggcagagc   | 840  |
| cagaagtaga agttgatgaa gatacaatgt ctacagttaa aatcctatat gtaagaaatc   | 900  |
| ttatgctgtc tacctctgaa gagatgattg aaaaggaatt caacaatatc aaaccaggtg   | 960  |
| ctgtggagag ggtgaagaaa attcgagact atgcttttgt gcacttcagt aaccgagaag   | 1020 |
| atgcagttga ggctatgaaa gcttttaaatg gcaaggtgct ggatgggtcc ccattgaag   | 1080 |
| tcaccctagc aaaaccagtg gacaaggaca gttatgttag gtataccgca ggcacaggtg   | 1140 |
| gaaggggcac catgctgcaa ggagagtata cctactcttt gggccaagt ttagatccca    | 1200 |
| ccacaacctc ccttgagctt cctgtcttct atgccccca gacctatgca gcaattccca    | 1260 |
| gtcttcattt cccagccacc aaaggacatc tcagcaacag agccattatc cgagccctct   | 1320 |
| ctgttagagg ggctgcggga gtgagaggac tgggcggccg tggtctattg gcatacacag   | 1380 |
| gcctgggtcg aggataccag gtcaaaggag acaaaagaga agacaaactc tatgacattt   | 1440 |
| tacctgggat ggagctcacc ccaatgaatc ctgtcacatt aaaaccccaa ggaattaaac   | 1500 |
| tcgctcccca gatattagaa gagatttgtc agaaaaataa ctggggacag ccagtgtacc   | 1560 |
| agctgcactc tgctattgga caagaccaa gacagctatt cttgtacaaa ataactattc    | 1620 |



|            |             |            |             |            |            |      |
|------------|-------------|------------|-------------|------------|------------|------|
| ctgctctagc | cagccagaat  | cctgcaatcc | accctttcac  | acctccaaag | ctgagtgcct | 1680 |
| ttgtggatga | agcaaaagacg | tatgcagccg | aatacaccct  | gcagaccctg | ggcatcccca | 1740 |
| ctgatggagg | cgatggcacc  | atggctactg | ctgctgctgc  | tgctactgct | ttcccaggat | 1800 |
| atgctgtccc | taatgcaact  | gcacccgtgt | ctgcagccca  | gtcgaagcaa | gcggtaaccc | 1860 |
| ttggacaaga | cttagcagca  | tatacaacct | atgaggctcta | cccaactttt | gcagtgactg | 1920 |
| cccgagggga | tggatatggc  | accttctgaa | gatgcttttt  | taaatttaag | aataagacac | 1980 |
| acaaaactct | attaaaaaaa  | aaaaagaaat | aaacctctaa  | ctcggtcccc | aatgatcata | 2040 |
| aataatatgt | ttcctaaaga  | aatgcctttc | cagagactgt  | atagcttata | ccaattatag | 2100 |
| aatcatgaag | taaaaaaaaa  | aaaaaaaa   |             |            |            | 2128 |

<210> 99

<211> 5730

<212> DNA

<213> NM\_019008.4| Homo sapiens hypothetical protein FLJ20232 (FLJ20232), mRNA

|            |             |
|------------|-------------|
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| cctccgcctc | cactcgccct  |
| cgtgctccct | tcagcccctt  |
| cgagctccg  | tcgcgaaggt  |
| 60         |             |
| cgtgtcccg  | aagtgaagg   |
| gccatgttg  | tgggtgacct  |
| ggggagaggt | accggccag   |
| 120        |             |
| aggcgagtcc | tgccggagtgg |
| tagcgcgcac | ggcctgcggt  |
| gtgacacca  | gcccctgcc   |
| 180        |             |
| gtcccccatg | gccccttgga  |
| gccgagaggc | ggtgctgagt  |
| ctctatcggg | ctctgttgcg  |
| 240        |             |
| ccagggccga | cagcttcgct  |
| acactgatcg | agactttcac  |
| ttgcctcca  | tcgcgcgtga  |
| 300        |             |
| attccgaaaa | aatcagaagc  |
| tagaggacgc | tgaggcccg   |
| gagaggcagc | tggagaagg   |
| 360        |             |
| cctggtcttt | ctcaacggca  |
| aattggggag | gatcatttag  |
| gatccctcaa | gggaaagagg  |
| 420        |             |
| acaaagggtc | cttctgtaga  |
| cactcctgct | ctcttccatc  |
| cccattctac | agatgtatta  |
| 480        |             |
| agaagcctca | gatgagcaat  |
| ggcaggcgct | ggtgagcgca  |
| aaggcaagaa | ggatgacaat  |
| 540        |             |
| ggcattggca | cggccattga  |
| ctttgtgctc | tccaatgccc  |
| ggctggtgct | gggggtgggt  |
| 600        |             |
| ggagcgccca | tgctgggcat  |
| cgccacgctg | gcagttaagc  |
| ggatgtacga | tcgggcgac   |
| 660        |             |
| agtgccecta | ccagccccac  |
| ccgcctgagc | cattcgggga  |
| aaaggagctg | ggaagaaccc  |
| 720        |             |
| aactggatgg | gtccccacg   |
| actgctgaac | agggacatga  |
| agacgggcct | gagccggctc  |
| 780        |             |

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| ttgcagacc  | ttcccacaga | ctctccacc  | ttgcacacag | atacattctg | ccgccccgg  | 840  |
| cccaagccag | tggccaggaa | gggccaggta | gacttgaaga | agtcacgact | ccgcatgtcc | 900  |
| ctgcaggaga | aactctctac | ttactaccgg | aaccgggcag | ccatccctgc | tggagagcag | 960  |
| gctcgggcca | agcaagctgc | tgtggacata | tgtgcgcagc | tcgggagctt | cctgcggggc | 1020 |
| aagttgcctg | acatgcgcgt | tcgggacatg | tacttgagtg | gcagcctcta | cgatgacctg | 1080 |
| caggtggtga | cagctgacca | catccaaact | attgtgcccc | ttgtgctgga | gcagaacctg | 1140 |
| tggtcatgta | ttcttggtga | agacaccatc | atgaatgtcc | ctggctctct | cctggtgcgt | 1200 |
| cgtgagaatc | cagagtactt | tcctcgtggg | agcagttact | gggaccgctg | tgtagtaggg | 1260 |
| ggctacctct | ctccaaagac | agtcgcagat | acatttgaga | aggtagtggc | tggctccatc | 1320 |
| aattggccag | ccatagggtc | cctcttgga  | tatgtgatcc | gcccggcccc | accccagaaa | 1380 |
| gccctcacac | tggagggtga | gtatgagcgt | gacaaacatc | tcttcattga | cttctgcca  | 1440 |
| tcagtgacct | tcggtgacac | agtcttggtg | gccaaaccac | accggctagc | ccagtatgac | 1500 |
| aacctgtggc | ggctgagcct | gcgtcccgcg | gagacggcac | gcctgcgggc | tctggaccag | 1560 |
| gctgaactcg | gctgccgato | tctgtgcctc | aagatcctca | aggccatgat | caagtcaccc | 1620 |
| ccggtctctg | gccacctcac | tgccagccag | ctaaccaatg | tcactctcca | cttggcccag | 1680 |
| gaggaggctg | actggtctcc | ggatatgctg | gccgaccgtt | tcctgcaggc | cttgagggga | 1740 |
| cttatoagct | acttagaggo | tggagtctcg | cccagtgcgc | taaaacccaa | ggtgaactta | 1800 |
| tttgcagagc | tcacccctga | agaaatagac | gaattaggat | acactctgta | ttgtctattg | 1860 |
| tctgagccag | agggtgctgt | gcagacgtag | ggcaggtgaa | ggccaaaagc | ggtgttggtg | 1920 |
| gtcaggccct | ggattctccg | ttagatacac | ttggctacct | agttggtgac | tcacagggtt | 1980 |
| cctgtgcct  | ggtgtcttgc | tgatcatcac | cctggctact | tcactgtgat | tagaatgaca | 2040 |
| tctctttctg | ctctattttt | gttaccocac | tcttctattt | ttgtttacca | atcactgtgc | 2100 |
| tctctgccgc | ccccggctc  | caggctaatt | ttctggaat  | gaattgagaa | ggtggcgtgc | 2160 |
| tggcctgagc | tgatggacca | cttggtgttt | tgcgttttgg | cccatgtttg | ctgcctctat | 2220 |
| ctggtctgcc | ttgcccggtt | gcctgttctc | attcagtgtc | ttttctattt | tttctctctc | 2280 |
| cgttcacgac | ttctgttttg | ctcttgtccc | tggagcatat | ctgcctaatt | aagatgttgc | 2340 |
| cttttagttg | aatgccactg | aagagctgtg | atagcatgtt | tcaaaagctg | actctacaga | 2400 |
| gcgagtgtcg | agacagtatt | tagggtttct | gggagtggag | ctggtagaag | agttggcctt | 2460 |
| tgaccacggt | tcctggagta | gaagtccatc | ctccccccaa | cctcctgacc | cattcataaa | 2520 |

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| tgttgagaat | gtctctcatg  | ggaacactgt | taatgaccca  | cacaggataa | gttgaatgca  | 2580 |
| aagttatttg | cagggttgaat | ttcttggttg | ctatttagcag | aagtgacag  | tagggaacca  | 2640 |
| gagctggtta | agggcctagt  | gaagggtttg | tgtgcccagt  | gtctgctcgt | catctgtggc  | 2700 |
| tgcagggggt | agacagacaa  | ggatggggac | tgccagggca  | ccacttcac  | atgaatgctg  | 2760 |
| gttttcacac | cttttcotta  | ttttattgcc | aatcaggaca  | aggccttgaa | ggaacgcagc  | 2820 |
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| atgcacggac | ctcttcccc   | tgtcctgttt | ctcaccacag  | acctggggag | atcggtgcta  | 3120 |
| ccaaggaaga | gagcacacag  | ataagacaga | ggggaggagg  | tgggcatttc | ctacattcct  | 3180 |
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| ctctctgcag | ctgtctcatt  | ccttcccaac | gatagtaaca  | ggaatgact  | ctttagcatc  | 3480 |
| gatacctcaa | catcaattta  | gggtagagat | tcctgcccct  | cttttgtcac | agattaggaa  | 3540 |
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| aaacataaag | ctgagaatct  | tgagagagct | catctaccct  | gtctgttggt | cagaactcaa  | 3720 |
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| atttggtttc | cctgccatga  | gtattaaaaa | aatttaagtt  | ttcccaagct | tgcattctctg | 3960 |
| accaaatttc | acataaaaac  | ttggaaggag | gctgggtgcg  | gtggctcatg | cttgtaatcc  | 4020 |
| cagcactggg | aagctaaggc  | gggtggatca | cttgagggtc  | ggagttcgag | accagcctgg  | 4080 |
| ccaacatggt | gaaacccctg  | ctccacgaaa | aagataaaaa  | taagctgggc | gtggtggcag  | 4140 |
| gcgcctataa | tcccagctac  | tcgggaggct | gaggcaggag  | aataacttaa | acccggggag  | 4200 |

|                                  |                                   |      |
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| cggaggttac agtgagctga gatcgtgcc  | ctgcactcca gctgggtga cagagtgaga   | 4260 |
| ccctatttca aaaaaataa aattggaaga  | agagcttaaa aaagataaga ttttaagag   | 4320 |
| tcccaagtta ttaagttag gtgtaattgt  | catttaagga aggcaaata gtttatcatc   | 4380 |
| cttcttaaag agcatctctt ttaactgttg | gacaaaacca taactttgtc attttacaag  | 4440 |
| gaagaacctc ttaagaagtc ctcaaacca  | gaagcaatgt gaactctcag cgctggctct  | 4500 |
| ggtgggttg ctgaccatga ctgggcaagc  | cgttcttttt gctgccatct tctctcatcat | 4560 |
| aaagtgtgga acataggcaa ttgctttgag | attcttggat agaagaggac aacattctgc  | 4620 |
| acctgcccc ttttttaaat ctttggggaa  | agatgagtaa ctttccccac tactctgect  | 4680 |
| tctgttcag taactcttac ttttgctga   | agtaacagca tcttctactt ctccatctag  | 4740 |
| agatttttgt gtgtgtgcc tcaaggtag   | caaaactttat acgtagccta acacttaaaa | 4800 |
| aatgcactca ttatcttaaa cctaataaat | tccagagttt attttgggtc tctctgttg   | 4860 |
| ccctcctaa aaaatgagct gaagatgaca  | gtatttttct ttacatgctt ggttatgact  | 4920 |
| tttaagttt tatttaaaata aatgttgaag | ctcaagttta aagaagcgtt gcagaggccc  | 4980 |
| acggtctcct ggggtccggc cacctgtcca | tattccacat ttgctgactg tgctccctgc  | 5040 |
| actccactca agttgagagt tcaaatagtc | ttgaagggga atcagcttca ggatggaagg  | 5100 |
| accacgaga ggccccgagg tgggaggggt  | ctgtaaatca agactactgc gagtgtccag  | 5160 |
| agctctctgc catgatactt ccttgggact | gacttggctg agaactgtgt ctgtcagagg  | 5220 |
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| ctgtaagtgg ccagaatacc agagaggttg | gttccatggt caaatgcaca gtagggtgtt  | 5400 |
| acctttacat ttggatcacc ttgtagtctt | taaattcttg gtccctgagg ccaagtccac  | 5460 |
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| tggaatcagt caccagttct tctgtactgt | cttggttagc tctatataag taggggcagc  | 5580 |
| ttagccctga ggcccagaga cctgctgtcc | tttttctcct tgaggaggga aataaaaactg | 5640 |
| cggaatacaa tgtccttcca tagcatggga | agaagaaaat aaacatctcc tttccaacaa  | 5700 |
| aaaaaaaaa aaaaaaaaaa aaaaaaaaaa  |                                   | 5730 |

<210> 100

<211> 2545

<212> DNA

<213> NM\_030882.2| Homo sapiens apolipoprotein L, 2 (APOL2), transcript variant alpha, mRNA

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gaggaagctg gaacgagggg taaggaaaac ctccagtcct ggacagtgc tggagagctc    300
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cgagccagag ccaacctcca gttaggagcg tatgccccac ccccgcatat cattgggcga   1080
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agcagaggaa ccatgatcgt ggggtgcagc actggaggca tcttgcttct gctggatgtg   1200
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gatggagtct cgctctatcg cccaggatgg agtgagtggt ctcaatctcg gctcactgca   1500
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|            |             |            |            |            |            |      |
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| caggcacctg | ccaccacgcc  | cggtcaattt | ttttgtattt | tcactggaga | cggggtttca | 1620 |
| ctgtgttagc | cacgatggtc  | tccatctect | gacctcgtga | tctgccacc  | tcggcctccc | 1680 |
| aaagtgtcgg | gattacagcg  | gtgagccacc | gcgcctggcc | aaaatgcaga | cattttatta | 1740 |
| gggggataag | gagggcaagg  | taaagcttat | ggaactgagt | gttagtgact | ttggcatttg | 1800 |
| tgtagctgag | cacagcaagg  | gaggggttaa | tgcagatggc | aagtgcacca | aggagaaggc | 1860 |
| aggaacactg | gagcctgcaa  | taaggaggga | gagaggactg | gagagtgtgg | ggaatgggaa | 1920 |
| gaagtagttt | acttttgact  | aaagaatata | ttgggcgaag | aatagagggg | gagcttgacg | 1980 |
| gaaccagcaa | tgagaaggcc  | aggaaaagaa | agagctgaaa | atggagaaaa | ccagagttag | 2040 |
| aactgttga  | tacaggagaa  | gaaacagcag | ctccactacc | gacccccccc | caggtttgat | 2100 |
| gtccttccaa | gaataaagtc  | tttccctggg | gatggtctct | cgtctctgtc | ttccagcatc | 2160 |
| cactctccct | tgctctctcg  | gggggtgtac | acagtcagcc | agtggctctt | tcattgatgt | 2220 |
| ggttgggggt | gttgctcatg  | gacgggtccc | ctccagggtt | ctaaagggtg | catgtccctt | 2280 |
| gcttgaaccc | tgagaggcag  | gtggtagggc | atggccacaa | tcccagctg  | aggagcaggt | 2340 |
| gtccctgaga | acccaaacct  | cccagagagt | atctgagaac | caaccaatga | aaacagtccc | 2400 |
| atcgctctta | gccggttaagt | aaacagtcag | aagattagca | tgaagcagct | ttagcattgg | 2460 |
| gaggaagcac | agatctctag  | agctgtcctg | tcgctgccca | ggattgacct | gtgtgtaagt | 2520 |
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<210> 101

<211> 1429

<212> DNA

<213> NM\_016612.1 Homo sapiens mitochondrial solute carrier protein (MSCP), mRNA

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| tcctgcgccc | cgccgagctg |
| gcggatggag | ctgcgcagcg |
| 60         |            |
| ggagcgtggg | cagccaggcg |
| gtggcgcgga | ggatggatgg |
| ggacagccga | gatggcggcg |
| 120        |            |
| gcggcaagga | gcgccacggg |
| tcggaggact | acgagaacct |
| gccgactagc | gcctccgtgt |
| 180        |            |
| ccaccacat  | gacagcagga |
| gcgatggccg | ggatcctgga |
| gcactcggtc | atgtaccgcg |
| 240        |            |

|            |            |            |            |             |            |      |
|------------|------------|------------|------------|-------------|------------|------|
| tggactcggg | gaagacacga | atgcagagtt | tgagtccaga | tcccaaaagg  | cagtagacaa | 300  |
| gtatctacgg | agccctcaag | aaaatcatgc | ggaccgaagg | cttctggagg  | cccttgcgag | 360  |
| gcgtcaacgt | catgatcatg | ggtgcagggc | cggcccatgc | catgtatctt  | gcctgctatg | 420  |
| aaaacatgaa | aaggacttta | aatgacgttt | tccaccacca | aggaaacagc  | cacctagcca | 480  |
| acgggatagc | tgggagtatg | gccaccctgc | tccacgatgc | ggtaaatgaat | ccagcagaag | 540  |
| tggtgaagca | gcgcttcgag | atgtacaact | cgcagcaccg | gtcagcaatc  | agctgcaccc | 600  |
| ggacgggtg  | gaggaccgag | gggttggggg | ctttctaccg | gagctacacc  | acgcagctga | 660  |
| ccatgaacat | ccccttcag  | tccatccact | tcacaccta  | tgagtctctg  | caggagcagg | 720  |
| tcaaccccc  | ccggacctac | aaccgcaggt | cccacatcat | ctcaggcggg  | ctggccgggg | 780  |
| ccctcgccgc | ggcgccacg  | acccccctgg | acgtctgtaa | gacctctctg  | aacctcagg  | 840  |
| agaacgtggc | ccctctcgtg | gccaacatca | gcggccggct | gtcgggtatg  | gccaatgcct | 900  |
| tccggacggg | gtaccagctc | aacggcctgc | cggctacttc | aaaggcatcc  | aggcgcgtgt | 960  |
| catctaccag | atgcctccca | ccgccatttc | ttggtctgtc | tatgagtctt  | tcaagtactt | 1020 |
| tctaccaag  | cgccagctgg | aaaatcgagc | tccatactaa | aggaaaggat  | catagaatct | 1080 |
| ttttctaaag | tcattctctg | cctgcaccca | gccccctgcc | ctctctctcc  | acgtagatca | 1140 |
| tttttttttt | tgcaggggtg | tgcctatggg | ccctctgtgc | cccaatgcct  | tagagagagg | 1200 |
| aggggacggc | acggccgctc | accggaaggc | tgtgtgcggg | gacatccgag  | gtggtggtgg | 1260 |
| acaggaagga | cttgggaagg | ggagcgagaa | attgcttttt | ctcttctctc  | ctgggcagaa | 1320 |
| tgtagctttt | ctgcttcaat | gtggcagcct | cctccctgga | tccttagatc  | ccagaggagg | 1380 |
| gaagaaaatt | tgagtgact  | gaaaacagta | aaaaaaaaaa | aaaaaaaaaa  |            | 1429 |

<210> 102

<211> 2368

<212> DNA

<213> NM\_017903.2| Homo sapiens hypothetical protein FLJ20618 (FLJ20618), mRNA

<400> 102

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| gctaccaaa  | tggtacagcc | ctaagcaagt | gaacacaaac | acatttaagt | gtattttgtc | 120 |

|  |      |
|--|------|
| tgattagatg ttagccagtt atgctatttc attcaaatgt ctgaaaaaat caattgacta  | 180  |
| ttcccttttc ctaaagggca gagacagata atctcacttc cagagaaatg acttgaggaa  | 240  |
| aaaaaagtgt tggctctttt gctcttttgt aattaaatcc ggatgtacct caaaagactt  | 300  |
| aagactgtgg tgataagatg ctttcctcag cagaaaggag ggaaaaaaaa acaactggaa  | 360  |
| ctcaaagctt gaaattctgt ggcaaaacat gagatgtcca ggattggagg ttgaaaagat  | 420  |
| ttcactacag tgtttctgca tagttggagc agataacttt cagtgtagcc acagccatgg  | 480  |
| actocagatt tccagatttt caagacctgg acctggaacc cgaaagagct tgtcacgatg  | 540  |
| cggcaggaac actggaggta gatTTTTTTT tTTTTTTGaa ttttgggact gttgaccttg  | 600  |
| ctgtgagaaa agagacaacg actgagcaag cactaccacc agcactgtta ctgggaatta  | 660  |
| gaagacctga gttttctgtc agacctcag tgcaaaactga ggatgtccca tccaaagtga  | 720  |
| attatgtcct gtgcctcctg attgctgagt gtccacctgg accttctgac taccttcctt  | 780  |
| gtgctatttc atcagcctac agacctggta cctggatttt tgcccagatg gattcctacc  | 840  |
| accttactac tgacgaagac acccattcca gtggaccact gtgaccaggg aggcattcag  | 900  |
| ccatcatgat gtggccttta cctccactcc tgtcttgttc taccagatt cagcacagcc   | 960  |
| ctttatagtg aagtcagagt cctcaagcca aatagctaaa gctgttttat cacaacaag   | 1020 |
| gcctagtttg ttocatgagt gtgcatttca tttcttcagt taaagccttc agagacacac  | 1080 |
| aataaatttg gaccagggga ttttttagtt attaatgctc totgaagaaa ggcaacatct  | 1140 |
| ttttgagagc agcattggac cacacccac aatctcaaat gattgaaatt catgaacatc   | 1200 |
| taggatccc tgaaggctac tggacctgt tttttctact tcaaatcctg tagtagccta    | 1260 |
| ctgaatgaga aaacatatto tgaccattg ggatcaaatc aaaggcacag tgaactcctc   | 1320 |
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| cttctcttga tacatcaagc atttttgtgc cgacttatto ttagatcatt ggttttccaa  | 1500 |
| aggctttgtg gccatgaagc cctttgagtg aaaaactgtgc agaagcccag agtaaaagtg | 1560 |
| aagctgctct ggatgaagta gtgaagcaag agtaggggccc tgaatcctgc tacaactatc | 1620 |
| ttcctttacc accgtgggtg cacctaaggg gacttcctta caacaccttg aactcttcgg  | 1680 |
| aacacagttt gaaaaccact gcccagaca gcaatatgtt tgacctgaat ggcattccaa   | 1740 |
| tcttttctgt acctccactc agcacagttc atgttcagta gatgtgaaac attcttagaa  | 1800 |
| atactgtgtg tgaacttaga aaagtgaag aagacaggca tgtctttgac ccaggaatg    | 1860 |



|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| atcatttgct | gaagatgggt | tcaagtgaac | ctagattaac | agccctccac | tcagatgga  | 1920 |
| tatccagtga | ttctagaat  | gggatatagc | cagagaacaa | ttctatgcac | cctacactga | 1980 |
| cagactccct | taagcaaac  | cagatgctct | actggtaact | gaagtacatg | actttgaagt | 2040 |
| cttgaccctc | catgaatacc | tgaattatca | gcaagcgggt | tttgaagctg | gtgcctcatt | 2100 |
| gaggccatat | tagagcaact | tgtacatttg | acctcttggt | atcagccatg | gtactctact | 2160 |
| tcgtgtgcaa | gagataacta | tgaagccaa  | attcaaatca | tggcaacatt | tcctaaaggg | 2220 |
| gctcaatata | tatcattcgt | cttcttttcc | aaactacaca | tcactgtatg | actcaaccag | 2280 |
| tagcagttat | attgcccctt | ggtttttatt | cagtttaact | actgtttcca | agataaatga | 2340 |
| gctaataagc | tttaaaaaaa | aaaaaaaa   |            |            |            | 2368 |

<210> 103

<211> 2577

<212> DNA

<213> nm\_003011.1 SET translocation (myeloid leukaemia-associated) Homo sapiens

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| caaagtcagt  | aaaaaggagc |
| tcaactccaa  | ccacgacggg |
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| gccgacgaga  | cctcagaaaa |
| agaacagcaa  | gaagcgattg |
| aacacattga  | tgaagtacaa |
| 120         |            |
| aatgaaatag  | acagacttaa |
| tgaacaagcc  | agtgaggaga |
| ttttgaaagt  | agaacagaaa |
| 180         |            |
| tataacaaac  | tccgccaaac |
| attttttcag  | aagaggtcag |
| aattgatcgc  | caaaatccca |
| 240         |            |
| aatttttggg  | taacaacatt |
| tgtcaacccat | ccacaagtgt |
| ctgcactgct  | tggggaggaa |
| 300         |            |
| gatgaagagg  | cactgcatta |
| tttgaccaga  | ggtgaagtga |
| cagaatttga  | agatattaaa |
| 360         |            |
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| ttattttgat  | gaaaatccct |
| actttgaaaa  | taaagtcttc |
| 420         |            |
| tccaaagaat  | ttcatctgaa |
| tgagagtggg  | gatccatctt |
| cgaagtccac  | cgaaatcaaa |
| 480         |            |
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| gacgaaacgt  | tcgagtcaaa |
| cgcagaataa  | agccagcagg |
| 540         |            |
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| agagagcttc  | ttacctgggt |
| ttactgacca  | ttctgatgca |
| 600         |            |
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| ggtcatcaaa  | gatgatattt |
| ggccaaaccc  | attacagtac |
| 660         |            |
| tacttggttc  | ccgatatgga |
| tgatgaagaa  | ggagaaggag |
| aagaagatga  | tgatgatgat |
| 720         |            |
| gaagaggagg  | aaggattaga |
| agatattgac  | gaagaagggg |
| atgaggatga  | aggtgaagaa |
| 780         |            |

|   |      |
|---|------|
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<212> DNA

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<211> 1672

<212> DNA

<213> NM\_004503.2| Homo sapiens homeo box C6 (HOXC6), transcript variant 1, mRNA

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<211> 3394

<212> DNA

<213> NM\_004764.2| Homo sapiens piwi-like 1 (Drosophila) (PIWIL1), mRNA

<400> 106

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| aagtttccaa agaactaata ggtttagtgt ttctttacca gtataacaat aagacataca  | 1020 |
| gagtggatga tattgactgg gaccagaatc ccaagagcac ctttaagaaa gccgacggct  | 1080 |
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| ggtccaaaaa aacaagaggt | gcaccattaa ttagtgttaa tccactagat    | aactggctgt  | 1560        |             |      |
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| ctgaagccta cttaagagtc | ttacagcaaa aggtcacagc agacacccag    | atagttgtct  | 1740        |             |      |
| gtctgttgtc aagtaatcgg | aaggacaaat acgatgctat taaaaaatac    | ccgtgtacag  | 1800        |             |      |
| attgccctac cccaagtcag | tgtgtgggtgg ccgaacctt aggcacacag    | caaacgtca   | 1860        |             |      |
| tggccattgc tacaagatt  | gccctacaga tgaactgcaa gatgggagga    | gagctctgga  | 1920        |             |      |
| gggtggacat cccctgaag  | ctcgtgatga tcgttggcat cgattgttac    | catgacatga  | 1980        |             |      |
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| gcctgcaagc            | ggctctgagg gcttggaaata              | gctgcaatga  | gtacatgccc  | agccggatca  | 2160 |
| tcgtgtaccg            | cgatggcgta ggagacggcc               | agctgaaaac  | actgggtgaac | tacgaagtgc  | 2220 |
| cacagttttt            | ggattgtcta aaatccattg               | gtagagggtta | caaccctaga  | ctaacggtaa  | 2280 |
| ttgtgggtgaa           | gaaaagagtg aacaccagat               | tttttgcctc  | gtctggagga  | agacttcaga  | 2340 |
| atccacttcc            | tggaacagtt attgatgtag               | aggttaccag  | accagaatgg  | tatgactttt  | 2400 |
| ttatcgtgag            | ccaggctgtg agaagtggta               | gtgtttctcc  | cacacattac  | aatgtcatct  | 2460 |
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| gagataagag            | cggtaaagta ggatgctcac               | tacaaccata  | gggtgggttt  | cagctcatat  | 3120 |
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| tattaacatt  | actatttatt | ttgttttga  | actgggacat | gattctattt | gttataaaat | 3360 |
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<210> 107

<211> 2524

<212> DNA

<213> NM\_000249.2| Homo sapiens mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) (MLH1), mRNA

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| atccaagaca  | atggcacccg gatcaggaaa gaagatcttg atattgtatg tgaagggttc 300  |
| actactagta  | aactgcagtc ctttgaggat ttagccagta ttctacctta tggctttcga 360  |
| ggtgaggett  | tggccagcat aagccatgtg gctcatgtta ctattacaac gaaaacagct 420  |
| gatggaaaat  | gtgcatacag agcaagttac tcagatggaa aactgaaagc cctcctctaa 480  |
| ccatgtgtcg  | gcaatcaagg gaccagatc acggtggagg acctttttta caacatagcc 540   |
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| ggcagggtatt | cagtacacaa tgcaggcatt agtttctcag ttaaaaaaca aggagagaca 660  |
| gtagctgatg  | ttaggacact acccaatgcc tcaaccgtgg acaatattcg ctccatcttt 720  |
| ggaaaatgctg | ttagtcgaga actgatagaa attggatgtg aggataaaac cctagccttc 780  |
| aaaatgaatg  | gttacatata caatgcaaac tactcagtg aagaagtcat ctcttactc 840    |
| ttcatcaacc  | atcgtctgtg agaatacaat tccttgagaa aagccataga aacagtgtat 900  |
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| gcacagcatc  | aaaccaagtt  | atacctcttc | aacaccacca | agcttagtga  | agaactgttc | 1740 |
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| agtgtgatata | acaaagtgtg  | ccaacataag | tggttgtagc | acttaagact  | tatacttgcc | 2460 |
| ttctgatagt  | attcctttat  | acacagtggg | ttgattataa | ataaatagat  | gtgtcttaac | 2520 |
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<210> 108

<211> 2928

<212> DNA

<213> NM\_001313.2| Homo sapiens collapsin response mediator protein 1 (CRMP1), mRNA

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| ttggattgca | aggggtttcc | aggggcattg  | atgacgggtc | tgtgtacgag | gtaccagcta  | 1740 |
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| cacccatcag | aaacctccac | cagtccaact  | tcagcttata | agggtcccag | atagatgaca  | 1860 |
| acaatcccag | gcgcacccgc | cacgcgcatg  | tgccgcccc  | tggtggccgc | tccaacatca  | 1920 |
| ccagccctcg | ttgaactggg | atgcgcggag  | gagctagcct | gaaggattct | gggaatcatg  | 1980 |
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<210> 109

<211> 1609

<212> DNA

<213> NM\_002145.2| Homo sapiens homeo box B2 (HOXB2), mRNA

|  |      |
|--|------|
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| atgaattttg aattttgagag ggagattggg tttataaaca gccagccgtc gtcgcccag  | 180  |
| tgtctgactt ccttccccgc tgtcttgagg acatttcaaa ctccatcaat caaggagtgc  | 240  |
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| ccaccgcgc gcgcactccc cgctgcccc ccggcccccg agttcccttg gatgaaagag    | 420  |
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| ggcggggcgc gcaggctgcg caccgcttac accaacacgc agctgtctga actggagaag  | 600  |
| gaattccact ttaataagta cctgtgcgcg ccacgcgcgc tcgagatcgc ggcttctgtg  | 660  |
| gacctaccg aaaggcaggt caaagtctgg ttccagaacc ggcgcatgaa gcacaagcgg   | 720  |
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| ttcacacaga aaaattccgt ttggtagact ccttccaatg aaatctcagg aataattaaa  | 1440 |
| ctctaggggg actttcttta aaataactag agggacctat tttctcttt tttatgtttt   | 1500 |
| agactgtaga ttatttatta aaattcttta ataataggaa aaggggaaag tattttattgt | 1560 |
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<210> 110

<211> 3262

<212> DNA

<213> NM\_002860.2| Homo sapiens aldehyde dehydrogenase 18 family, member A1 (PYCS/ALDH18A1), mRNA

<400> 110

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|------------|-------------|------------|-------------|-------------|-------------|------|
| ctgctgaaac | gtttaagcct  | ctccacatcc | aaattgaaca  | gcctggccat  | cggctctgcga | 1380 |
| cagatcgag  | cctcctccca  | ggacagcggt | ggacgtgttt  | tgcgcgcac   | ccgaatcgcc  | 1440 |
| aaaaacttg  | aactggaaca  | agtgactgtc | ccaattggag  | ttctgctggt  | gatctttgaa  | 1500 |
| tctcgtctc  | actgtctacc  | ccaggtggca | gctttggcta  | tgcgaagtgg  | caatggcttg  | 1560 |
| ttactcaaag | gaggggaagga | ggctgcacac | agcaaccgga  | ttctccacct  | cctgacccag  | 1620 |
| gaggctctct | caatccatgg  | agtcaggag  | gccgtgcaac  | tggtgaatac  | cagagaagaa  | 1680 |
| gttgaagatc | tttgcgcct   | agacaaaatg | atagatctga  | tcattccacg  | tggctcttcc  | 1740 |
| cagctggta  | gagacatcca  | gaaagctgct | aaggggattc  | cagtgtatgg  | gcacagcgaa  | 1800 |
| gggatctgtc | acatgtatgt  | ggattccgag | gccagtgttg  | ataaggtcac  | caggctagtc  | 1860 |
| agagactcta | aatgtgaata  | tccagctgcc | tgtaatgctt  | tggagacttt  | gttaatccac  | 1920 |
| cgggatctgc | tcaggacacc  | attatttgac | cagatcattg  | atatgtctag  | agtggacag   | 1980 |
| gtaaaaatc  | atgcaggccc  | caaatttgcc | tcctatctga  | ccttcagccc  | ctccgaagt   | 2040 |
| aagtcactcc | gaactgagta  | tggggacctg | gaattatgca  | ttgaagtgtg  | ggacaacgtt  | 2100 |
| caggatgcca | ttgaccacat  | ccacaagtat | ggcagctccc  | acacggatgt  | catcgtcaca  | 2160 |
| gaggacgaaa | acacagcgga  | gttcttctcg | cagcacgtag  | acagtgcctg  | tgtgttcttg  | 2220 |
| aatgccagca | ctcgtcttcc  | tgatggttac | cgctttggac  | tgggagctga  | agtgggaatc  | 2280 |
| agtacatcga | gaatccacgc  | ccggggacca | gtaggacttg  | agggaactgt  | tactactaag  | 2340 |
| tggctgctgc | gaggggaagga | ccacgtggtc | tcagatttct  | cagagcatgg  | aagttaaaaa  | 2400 |
| tatcttcatg | agaacctccc  | tattcctcag | agaaacacca  | actgaaaaag  | gccaggaaaa  | 2460 |
| cccggaatt  | ttccaaaagg  | tcttcacgtt | aaacttgtct  | tatctcagga  | gagagcccgc  | 2520 |
| tcttgtctcc | cagttctctg  | tagggctctc | ctgttggaaa  | gtgtacctgg  | atgcttcttg  | 2580 |
| gctccgtttg | gcaatagcaa  | tcttggctga | tgtgcacagt  | ctggctccca  | gtccaccctt  | 2640 |
| tttttttaaa | gtaagaaaaat | agttgctacc | gatagggaact | ttgccaaagc  | caattatctt  | 2700 |
| ctaggattga | aaggtgcatt  | ttccccataa | aaaaggcgag  | gaaaacccat  | ggctgctttg  | 2760 |
| tgtcacctca | gtgacttaca  | gtcccccttc | gcatttagtt  | ggtaactagag | ccagtcaccc  | 2820 |
| ttaaacaaac | ttttcgcgtt  | ttattttctt | cacatgtagt  | catcttcaaa  | aaggaaaagt  | 2880 |
| ttggaatttt | agaaaagggg  | caactcttct | tttttagcatt | ctcatcagaa  | agtcacaaaa  | 2940 |
| atcgatggaa | tcatttccac  | tgggaagatt | gaccttttgt  | atttatttgt  | ggggtaaaat  | 3000 |
| aataagcatt | ccagatgctt  | gcagcttcct | gcattccagg  | gatgctgtgt  | ccccctgat   | 3060 |

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| gcagctggaa | cccaagctgc | agcaggagat | gcaagtttca | ggatgttccc | cactgagctg | 3120 |
| gaggaatata | tacagcagtg | atgcttgaaa | ttttgtatg  | aattattttg | tcgtcctacc | 3180 |
| ctttctctcc | aaaacaaaaa | ttagaggatt | attttaatac | tttgattctc | tccccctttt | 3240 |
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<210> 111

<211> 2899

<212> DNA

<213> NM\_005655.1| Homo sapiens TGFβ inducible early growth response (TIEG), mRNA

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| gtggccaagc | agccagcagc | 120  |
| accatgctca | acttcgggtc | 180  |
| tctgaaaggc | caaaagagag | 240  |
| gaagctgtag | aagcacttat | 300  |
| gttgaaaaa  | gacctgttac | 360  |
| ggaacacctg | attttcatac | 420  |
| gactttgaac | cctctcaagt | 480  |
| aagtcactct | cagatactgc | 540  |
| agcccagtat | ctgcccccaa | 600  |
| gctgatgccc | agctatgtaa | 660  |
| tatcagaaca | attcttttag | 720  |
| ataccatgtg | ccgctgtgtc | 780  |
| gttgatgaga | aagcaagtgc | 840  |
| atctgcaggt | ctcagccagc | 900  |
| cctgcagtat | ctgcaggggg | 960  |
| cctgccaaca | acccgtgtgt | 1020 |
| gccgtttgcc | cccctgttgt | 1080 |

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| gtggtacccc  | agcccgttgt  | gcagagttca | aagcctccgg  | tggtgagccc  | gaatggcacc  | 1140 |
| agactctctc  | ccattgcccc  | tgctcctggg | ttttcccttt  | cagcagcaaa  | agtcactcct  | 1200 |
| cagattgatt  | catcaaggat  | aaggagtcac | atctgtagcc  | acccaggatg  | tggcaagaca  | 1260 |
| tactttaaaa  | gttccccatc  | gaaggcccc  | acgaggacgc  | acacaggaga  | aaagcctttc  | 1320 |
| agctgtagct  | ggaaaggttg  | tgaaggagg  | tttgcccgtt  | ctgatgaact  | gtccagacac  | 1380 |
| aggcgaaccc  | acacgggtga  | gaagaaattt | gcgtgcccc   | tgtgtgaccg  | gcggttcattg | 1440 |
| aggagtgaac  | atttgaccaa  | gcattgcccg | cgccatctat  | cagccaagaa  | gtaccaaaac  | 1500 |
| tggcagatgg  | aagtgaagaa  | gctaaatgac | attgctctac  | ctccaacccc  | tgctcccaca  | 1560 |
| cagtgcagaca | ccggaagtgt  | aagagtcaga | actaactttg  | gtctcaggcg  | gagccagtgg  | 1620 |
| tgtgtgtaaaa | atgcttccac  | tgcaagtctg | tgccccca    | acgtgggctt  | aaagcagaag  | 1680 |
| ccccacagcc  | tggcacgaag  | gccccgcctg | ggttagggtga | ctaaaaggcg  | ttcggccaca  | 1740 |
| ggcaggtcac  | agaaaggcag  | gtttcatttc | ttatcacata  | agagagatga  | gaaagctttt  | 1800 |
| attcctttga  | atattttttg  | aaggtttcag | atgaggtcaa  | cacaggtagc  | acagattttg  | 1860 |
| aatctgtgtg  | catatttgtt  | actttacttt | tgctgtttat  | acttgagacc  | aacttttcaa  | 1920 |
| tgtgattctt  | ctaaagcact  | ggtttcaaga | atatggaggc  | tgggaagaaa  | taaacattac  | 1980 |
| ggtacagaca  | tggagatgta  | aaatgagttt | gtattattac  | aaatattgtc  | atctttttct  | 2040 |
| agagttatct  | tctttattat  | tcctagtctt | tcagtcacac  | atcgtggatg  | tagtgattaa  | 2100 |
| atatatctag  | aactatcatt  | tttacctat  | tgtgaatatt  | tggaaattgaa | cgactgtata  | 2160 |
| ttgctaagag  | ggccccaaaga | attggaatcc | tccttaattt  | aattgctttg  | aagcatagct  | 2220 |
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| agtattttct  | ttttattctg  | ttatatagtg | gatgatatac  | acagtgccaa  | aacaaaagta  | 2700 |
| cattgcttaa  | aatatatagt  | gaaaaatgtc | actatatctt  | cccatttaac  | attgtttttg  | 2760 |

|  |      |
|--|------|
| tatattgggt gtagatttct gacatcaaaa cttggaccct tggaaaacaa aagttttaat  | 2820 |
| taaaaaaaaat ccttgtgact tacaatttgc acaatatttc ttttgttgta ctttatatct | 2880 |
| tgtttacaat aaagaattc   | 2899 |

<210> 112

<211> 3138

<212> DNA

<213> NM\_018223.1| Homo sapiens checkpoint with forkhead and ring finger domains (CHFR), mRNA

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|--|------|
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| cccgatggag cggccccagg aaggcaagca gtcgcgcg ccgcagccct ggggacggct    | 120  |
| cctgcgtctg ggcgcggagg agggcgagcc gcacgtctct ctgaggaagc gggagtggac  | 180  |
| catcgggcgg agacagaggt gcgaccttct ctccccagc aataaaactgg tctctggaga  | 240  |
| tcactgtaga attgtagtgg atgaaaaatc aggtcagggt acaactggaag ataccagcac | 300  |
| cagtggaaac gtgattaaca agctgaaggt tgttaagaag cagacatgcc ctttacagac  | 360  |
| tggggatgtc atctacttgg tgtacaggaa gaatgaaccg gaacacaacg tggcatacct  | 420  |
| ctatgaatct ttaagtgaac agcaaggcat gacacaagaa tcctttgaga tgggtgcctg  | 480  |
| ctgtgttgcc caggctgggt taaaactcct gggatcaagt gatcctccca ccttggcctc  | 540  |
| ccaaagtatt gtgattacag ggtctggggg tgggtggcatc tcccctaag gaagtggctc  | 600  |
| ctctgtggca agtgatgaag tctccagctt tgcctcagct ctcccagaca gaaagactgc  | 660  |
| gtccttttcg tcgttggaac ccagagatca ggaggatttg gagcccgaga agaagaaaat  | 720  |
| gagaggagat ggggaccttg acctgaacgg gcagttgttg gtcgcacaac cgcgtagaaa  | 780  |
| tgcccaaac gccacagg agctcagagc agcggctggg aagccagaca agatggaggga    | 840  |
| gacgctgaca tgcattatct gccaggacct gctgcacgac tgcgtgagtt tgcagccctg  | 900  |
| catgcacacg ttctgcgcgg cttgctaact gggctggatg gagcgctcgt ccctgtgtcc  | 960  |
| tacctgcgcg tgtcccgctg agcggatctg taaaaaccac atcctcaaca acctcgtgga  | 1020 |
| agcataacct atccagcatc cagacaagag tcgcagtgaa gaagatgtgc aaagtatgga  | 1080 |
| tgccaggaat aaaatcactc aagacatgct gcagcccaaa gtcaggcggt ctttttctga  | 1140 |

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| cattagccag  | ccatacgtcg | tgtgccggca | gtgtcctgag  | tacagaaggc  | aggcggcgca | 1260 |
| gcctccccc   | tgcccagcac | ccgagggcga | gccaggagcc  | ccacaggccc  | tgggggatgc | 1320 |
| acccccccag  | tccgtcagcc | tgacgacagc | agtcacagat  | tacgtgtgcc  | ctctgcaagg | 1380 |
| aagccacgcc  | ctgtgcaact | gctgcttcca | gcccattgcc  | gaccggagag  | cggagcgcga | 1440 |
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| gtactggggc  | tgcaccgcga | ccggtctgta | cgggtgcctg  | gccccgtttt  | gtgagctcaa | 1560 |
| cctgggtgac  | aagtgtctgg | acggcgtgct | gaacaacaac  | agctacagtg  | cagacatcct | 1620 |
| gaagaattac  | ctggcaacca | gaggtttgac | atggaaaaac  | atgttgaccg  | agagcctcgt | 1680 |
| ggctctccag  | cggggagtg  | ttctgctgtc | tgattacaga  | gtcacgggag  | acaccgttct | 1740 |
| gtgttactgc  | tgtggcctgc | gcagcttccg | tgagctgacc  | tatcagtatc  | agcagaacat | 1800 |
| tctgtcttc   | gagttgccag | tggccgtaac | atcccgtcct  | gactgctact  | ggggccgtaa | 1860 |
| ctgccgcact  | caggtgaaa  | ctcaccacgc | catgaaattc  | aatcatatct  | gtgaacagac | 1920 |
| aaggttcaaa  | aactaagcat | ccagaggccc | tgagcagctt  | tcagcactgg  | aggtgaagag | 1980 |
| agcgtgtttt  | taaaatacac | aggcaagcac | gtcaaggtgt  | tttcacagcc  | ccctgagggg | 2040 |
| agggacgcag  | ggtctccgac | aggtgctctg | gggtgactct  | tctgtggagc  | tttacctctt | 2100 |
| gagtgagacc  | ctcccccag  | ccccgggggc | cgcagccccc  | cctcctgggtg | agcgtggg   | 2160 |
| agggtcctg   | gtggcatcag | cagcagagac | gaagccttct  | tgtaacatgc  | ggcgtcctg  | 2220 |
| ccgagagggg  | cagttttgct | cttttgtaca | ttttccgaaa  | ctacagttaa  | agcggaagtc | 2280 |
| tgttttcagg  | aaaagtttca | agggagaagg | gcaagtttat  | caaaaacatt  | gtttcaggag | 2340 |
| aaggggagcat | aagtttacag | cctacaggac | gtacacaata  | tctgtctgct  | gggaaaacca | 2400 |
| cagcatttta  | tctatttttt | attttaatat | gtttggtgct  | tatcttctaa  | taagatttaa | 2460 |
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| tatagtatgg  | tatttgaaa  | aataagcata | tgttctgtgt  | tattaaaaaa  | agaaaccttc | 2580 |
| caatgtccaa  | aactgctaac | cctcgacgtg | gccgccaaagt | tagtcgtccc  | ttgctaaccg | 2640 |
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|   |      |
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| gaaaaaaaaag tttcttatct ttgttgaaa tcacctgtta tcttgtttg taaactgata  | 3000 |
| acttttttgc ttcttctcag gaatacagtt ttcaactgtt gtcttgcctc tgatagaaac | 3060 |
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| gagccgcggt tgcctctc   | 3138 |

<210> 113

<211> 2466

<212> DNA

<213> NM\_024645.1| Homo sapiens hypothetical protein FLJ13842 (FLJ13842), mRNA

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| gctccagccc acagcttcgc tctactgtc gccagggcag ctggcctctg ggcaaccggcg  | 120  |
| gcccctctgc ctgcgggaaa agcctgatga agtcctccga tattgatcag gattttattca | 180  |
| cagacagtta ctgcaaggtg tgcagtgcac agctgatctc cgaatcgcag cgtgtggccc  | 240  |
| actacgagag tcgaaaaaat gcaagcaaag tccgactgta ttacatgctt cccccaggg   | 300  |
| atggagggtg tcttgccaag aggtccggt cagaaaatgg aagtgatgcc gacatggtg    | 360  |
| ataagaacaa gtgtgcaca ctctgcaaca tgtcattcac ttcagcggtg gtggccgatt   | 420  |
| cccattatca agggcaaaatc cagccaaga gggttaaaact cttgctagga gagaagacc  | 480  |
| cattaaagac cacagcaaca cccctgagcc cacttaagcc cccacggatg gacactgtc   | 540  |
| cgtgtgtcgc atctccctat caaagaagag attcagacag atactgtggg ctctgtgcag  | 600  |
| cctggtttaa taacctctg atgccccagc aacattatga tggcaagaaa cacaaaaaga   | 660  |
| atgcggcaag agttgctttg ttagaacaac tggggacaac cctggatatg ggggaactga  | 720  |
| gaggctgtag gcgcaattac agatgtacca tctgcagtgt ctccctaacc tcaatagaac  | 780  |
| agtatcatgc ccatctgaaa ggatctaaac accagaccaa cctgaagaat aagtagtgaa  | 840  |
| agcatcaatc aagacataag aacaaaacat tagcatttct ctgccttgga gaattgttta  | 900  |
| tcaaccacca gaggaggctt ctttcttgaa caataaacat ttcttataag gattcacaga  | 960  |
| ttcacatacg actgatcttg atttttggaa atgaatgagg tttctttttt ctttttcctt  | 1020 |

|  |      |
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| atatttagca catgttctaa attataatcc tatagcaaac agttggagca ttattcaaac  | 1140 |
| tgaaagtgga aaaattttaa ttccaattt attctagatt tcttcagagc ataattattc   | 1200 |
| tgttaaatcc tcaatgagtg tgatgtaaac cacctctatc cagaaatata cattcttttc  | 1260 |
| tcatcatgtt ggacacagtt gagggtgaca tgcacagaac tggaacagat cactattagt  | 1320 |
| ggaaaatacc aaatggacaa ataaatacca gtcgttttct ccgttctcca agcacaggag  | 1380 |
| ccaggtttac catctgaaca atgaagacga agggagtaaa taaaggaaga attctcatct  | 1440 |
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| gccaaataat agcttaggaa aagaattagt ctgcctgcat gatgatcttc ttaggcaaaa  | 1560 |
| acgtcttcac agcccttgac cttggtgaat ttttttcccc aaaagcatcc aaaagaagaa  | 1620 |
| ttataaacc cagaacgaga tggaataaaa caagtatttt ttttttatga tgtttggcct   | 1680 |
| gaactgtggg ctttaattgg gggatactga tcgttttgaa agaagtgaga aaattctgaa  | 1740 |
| gaaatggcgg ccttgggcta ggcggggctc cctatttctt ctgtttctca ctgaagtcct  | 1800 |
| actgctgagc caagactcac tcactctgga aagagcatga ccgataaaga aaacagttcc  | 1860 |
| tttctgatgg ggagcgtctg agtgacagatc atgaggtctt ttctctaggt ttaattcttt | 1920 |
| tccatggtga ccggacttgg tgtcttgtag cctggttacg aagtgggacg ttgagcttct  | 1980 |
| actgacgatg cctgcgatgg accagctggg atctggctgg ggetgccctg tgtccctaac  | 2040 |
| gaccataggc aatccatctt cttgtgtcag caatttctgg acaccactg tttccacca    | 2100 |
| agagctgagg tggcaacaac tcagtgagca ataaacaaaa tgacacagaa atgcacagtg  | 2160 |
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| cccgctcagg agggaccagg tctgccagtt tctgtgcctg cagagagacg aagccccacg  | 2280 |
| agccacaccc tactctacaa gaggaagggt ggttgatggt gaagaatcta ttttctgtt   | 2340 |
| ttggaaagca cacagccgac ctacaaacct cctgtgatgg tgtttcttcg gatgtgtaaa  | 2400 |
| ataaggcttt atttgtcaat tccgtgtaa aataagcatt gtcgagtaa aaacagcagc    | 2460 |
| aacaac   | 2466 |

<210> 114

<211> 3658

<212> DNA

<213> NM\_025195.2| Homo sapiens tribbles homolog 1 (Drosophila) (TRIB1), mRNA

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| catcaggatg  | aaagctgctg | aactcggcat  | ggcgctcct  | cttctctgtt | gggatgagtg | 1860 |
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| gatggaacca  | tgaaccgaga | ctcttctctg  | tttcctgcc  | agacctcctc | tgactaattg | 2340 |
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| tacattatcc | gactaaggac | tctgggcttg | cagggccttc | tgccgggaaa | gctagaaaaca | 3540 |
| ctaggttctt | cctgtacata | cgtgtatata | tgtgaacagt | gagatggcgc | tttctgactt  | 3600 |
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<210> 115

<211> 4624

<212> DNA

<213> NM\_033331.1| Homo sapiens CDC14 cell division cycle 14 homolog B (S. cerevisiae) (CDC14B), transcript variant 2, mRNA

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| ctgcagcccc  | gtgcctctgg ccgcgcacgc cggctcgggg cacctggggg cgggtcgggg 180  |
| gcgcgcggccg | cggcaggagg cgtgttagcg agggctcggc cgcgcgtcct gcggcgccgc 240  |
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| atgtacatta  | tttcagcata gataatgaac ttgaatatga gaactctac gcagattttg 720   |
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| caaatgctgc  | cttccttgtt ggatgctaca tggttatata ttgggggaga accccagaag 900  |
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|            |               |             |             |             |            |      |
|------------|---------------|-------------|-------------|-------------|------------|------|
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| aagcagaaaa | tggagattta    | aattggataa  | taccagacgg  | atttattgcc  | ttctgtggac | 1140 |
| ctcattcaag | agccagactt    | gaaagtgggt  | accaccaaca  | ttctctcgag  | acttatattc | 1200 |
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| agcaagaacc | cgaacctgac    | agtgatgatg  | acgaaatcaa  | tggagtgaca  | caaggtgata | 1740 |
| gaattcgggc | cttgaaaagc    | agaagacaa   | ccaaaacaaa  | cgctattcct  | ctcacagtaa | 1800 |
| ttcttcaatc | cagtggttcag   | agctgtaaaa  | catctgaacc  | taacatttct  | ggcagtgacg | 1860 |
| gcattactaa | aagaaccacc    | agatctgctt  | caaggaaaaag | cagtgttaaa  | agtctctcca | 1920 |
| tttcaaggac | taaaacagto    | ttgcgttaag  | taaaaacctg  | tgaccagagc  | tgaaggaaga | 1980 |
| ctctaggact | gaaaactgca    | acagaaatta  | gcacaatttg  | aaaacaaaac  | aaaattgcaa | 2040 |
| aagccttagt | tgcctttttc    | acctaagaag  | ttgatcaatg  | gagaaaaatg  | ccactggagt | 2100 |
| ttgaataatg | aactttgagt    | ttgggtgcaa  | gcaaatgact  | cagagaaggg  | tcagctctc  | 2160 |
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| agaatttgg   | gaggagcagc | gcctcgtgag | agcagaatgg | cctggcgtgg  | ccagtgtctc | 4620 |
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<210> 116

<211> 3919

<212> DNA

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| tttccctgca | gccaccctg cttcccgatc cttccctgac ccagggggcc tctaccactt 600   |
| ctgcctctac | tggaaccgac atgctggggg attacatctt ctctatggca agcgtgactt 660  |
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| gaagcatccc | cagaaggcct caaggaggcc ctccggctgcc cccgccagcc agcagttgca 960 |
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|  |      |
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| actcaagctg agcccatagg gctggggctt ccccatcttt ctgggtgacgc tgggtggcct | 1920 |
| ggtggatgtg gacaactatg gccccatcat ctgggtctgt cataggactc cagagggcgt  | 1980 |
| catctacctc tcatgtgtct ggatccggga ctccctggtc agctacatca ccaacctggg  | 2040 |
| cctcttcagc ctggtgttcc tgttcaacat ggccatgcta gccaccatgg tgggtgcagat | 2100 |
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| gcttgtcgtc ctctaccttt tcagcctcat cactctcttc caaggctccc tcatcttcat  | 2280 |
| ctggtactgg tccatgcggc tgcaggcccc ggggtgcccc tccctctga agagcaactc   | 2340 |
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|            |            |             |            |            |             |      |
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| gtaccaaatc | ttttgtcttt | tgatattaaa  | aagaagtaca | tgttcattgt | agagaatttg  | 3780 |
| gaaactgtag | aagagaatca | agaagaaaaa  | taaaaatcag | ctgttgtaat | cacctagcaa  | 3840 |
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<211> 7401

<212> DNA

<213> NM\_014615.1| Homo sapiens KIAA0182 protein (KIAA0182), mRNA

<400> 117

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| tgcggggccc | tggcatgaaa | ggcatgagcc | atgagcccaa | gtccccttcg | ctagggatgc  | 120 |

|  |      |
|--|------|
| tttccaccgc gaccaggacc accgccaccg tcaacccct caccctctcg cgcgtcaatg     | 180  |
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| cggaggcaga gcacaggcgg gagagcacca ccaggccagg accaaaccgt cagcagccag    | 1740 |
| gtggccgtga ccctccgcag cactttgggg ggccaccacc tctgatttcg ccaaagcccc    | 1800 |



|            |             |             |            |            |            |      |
|------------|-------------|-------------|------------|------------|------------|------|
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| agacgcggcg | ggcgaaagc   | cactctctgc  | acagccaccc | ggctgcattt | gagcccgacc | 1920 |
| gccaggcagc | cgtgccgctg  | gtgaaggtgg  | agcgggtctt | ctgcccgagg | aaagcagagg | 1980 |
| aggggccacg | gaagcgtgag  | cctgcccttc  | tggacaagta | ccagccacct | ccgccgccac | 2040 |
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<211> 2745

<212> DNA

<213> NM\_033542.1| Homo sapiens chromosome 20 open reading frame 35 (C20orf35), mRNA

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| accacataat tcttgggttt ccgttctctc ttgctagtga tttctgaaca tgttcaatgg   | 1920 |
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|  |      |
|--|------|
| gatttttaga aatggccaaa agtcacgtga tccaaacttt ttttcagtaa tatggagact  | 2580 |
| gagctgcacg ttagttgggg atcaaaaata tgtgacctta atgagatttt tatgatttct  | 2640 |
| aaagtaacaa taaaagcagc ttttagagtt gaggttccaga gagggcaggg caatggcagt | 2700 |
| gacatgtttg tcattttaat aataaataac atctattgag tgctt                  | 2745 |

<210> 119

<211> 2152

<212> DNA

<213> NM\_138932.1| Homo sapiens apobec-1 complementation factor (ACF), transcript variant 2, mRNA

|  |      |
|--|------|
| <400> 119  |      |
| tttgatatga cgattagagc ataaccgag tgacacgttg aattcgccat aatcaaggaa   | 60   |
| accttttccg ggtggggatc tctgaaatta ctacagataac agtgctgtgc caaaaacctg | 120  |
| tggtttttct ctacaaaaat tattgagcaa ccctaattaa cctgattttt tgctgataat  | 180  |
| cactctcaat ggaatcaaat cacaaatccg gggatggatt gagcggcact cagaagggaag | 240  |
| cagccctccg cgcactggtc cagcgcacag gatatagctt ggtccaggaa aatggacaaa  | 300  |
| gaaaaatatg tggccctcca cctggttggg atgctgcacc cctgaaaagg ggctgtgaaa  | 360  |
| tttttatttg aaaacttccc cgagacottt ttgaggatga gcttatacca ttatgtgaaa  | 420  |
| aatcggtaa aattttatgaa atgagaatga tgatggattt taatggcaac aatagaggat  | 480  |
| atgcatttgt aactttttca aataaagtgg aagccaagaa tgcaatcaag caacttaata  | 540  |
| attatgaaat tagaaatggg cgcctcttag gggtttgtgc cagtgtggac aactgccgat  | 600  |
| tatttgttgg gggcatccca aaaacccaaa agagagaaga aatcttatcg gagatgaaaa  | 660  |
| aggttactga aggtgttgtc gatgtcatcg tctacccaag cgctgcagat aaaacccaaa  | 720  |
| accgaggctt tgccttcgtg gagtatgaga gtcacgagc agctgccatg gcgaggagga   | 780  |
| aactgctacc aggaagaatt cagttatggg gacatgggat tgcagttagc tgggcagagc  | 840  |
| cagaagtaga agttgatgaa gatacaatgt ctacagttaa aatcctatat gtaagaaatc  | 900  |
| ttatgctgtc tacctctgaa gagatgattg aaaaggaatt caacaatatc aaaccaggtg  | 960  |
| ctgtggagag ggtgaagaaa attcgagact atgcttttgt gcacttcagt aaccgagaag  | 1020 |
| atgcagtga ggcatatgaa gctttaaatg gcaaggtgct ggatgggtcc cccattgaag   | 1080 |

|            |            |            |             |            |            |      |
|------------|------------|------------|-------------|------------|------------|------|
| tcaccctagc | aaaaccagtg | gacaaggaca | gttatgttag  | gtatacccca | ggcacaggtg | 1140 |
| gaaggggcac | catgctgcaa | ggagagtata | cctactcttt  | gggccaaagt | tatgatccca | 1200 |
| ccacaacctc | ccttgaggct | cctgtcttct | atgcccccca  | gacctatgca | gcaattccca | 1260 |
| gtcttcattt | cccagccacc | aaaggacatc | tcagcaacag  | agccattatc | cgagcccctt | 1320 |
| ctgttagaga | aatttacatg | aatgtacctg | taggggctgc  | gggagtgaga | ggactgggcg | 1380 |
| gccgtggcta | tttggcatac | acaggcctgg | gtcgaggata  | ccagggtcaa | ggagacaaaa | 1440 |
| gagaagacaa | actctatgac | attttacctg | ggatggagct  | caccccaatg | aatcctgtca | 1500 |
| cattaaaaac | ccaaggaatt | aaactcgctc | cccagatatt  | agaagagatt | tgtcagaaaa | 1560 |
| ataactgggg | acagccagtg | taccagctgc | actctgctat  | tggacaagac | caaagacagc | 1620 |
| tattcttgta | aaaaataact | attctcgctc | tagccagcca  | gaatcctgca | atccaccctt | 1680 |
| tcacacctcc | aaagctgagt | gcctttgtgg | atgaagcaaa  | gacgtatgca | gccgaataca | 1740 |
| ccctgcagac | cctgggcata | cccactgatg | gaggcgatgg  | caccatggct | actgtgctg  | 1800 |
| ctgctgctac | tgttttccca | ggatatgctg | tcctaatgc   | aactgcaccc | gtgtctgcag | 1860 |
| cccagctcaa | gcaagcggta | acccttggtc | aagaacttagc | agcatatata | acctatgagg | 1920 |
| tctacccaac | ttttgcagtg | actgcccgag | gggatggata  | tggcaccttc | tgaagatgct | 1980 |
| tttttaaat  | taagaataag | acacacaaaa | ctctattaaa  | aaaaaaaaag | aaataaacct | 2040 |
| ctaactcgg  | ccccaatgat | cataaataat | atgtttccta  | aagaaatgcc | tttcagaga  | 2100 |
| ctgtatagct | tataccaatt | atagaatcat | gaagtaaaaa  | aaaaaaaaaa | aa         | 2152 |

<210> 120

<211> 3010

<212> DNA

<213> NM\_145343.1| Homo sapiens apolipoprotein L, 1 (APOL1), transcript variant 2, mRNA

|            |            |            |
|------------|------------|------------|
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| tgaggactgg | aggacctgtc | tggttattat |
|            |            | 60         |
| acagacgcat | aactggagg  | gggatccaca |
| cagctcagaa | cagctggatc | ttgctcagtc |
|            |            | 120        |
| tctgccagg  | gaagattcct | tgacttctgg |
| ggtgatggag | aagaaacagg | ctgtgctgtg |
|            |            | 180        |
| tcctaatgg  | gaaacgtggc | tgagacagg  |
| gagtgagaag | ggtgcgttgc | agaatggtgc |
|            |            | 240        |

|  |      |
|--|------|
| ctgtggcatg atgccagctt tgcaatcatg agattcaaaa gccacactgt ggaattgagg  | 300  |
| aggccctgca gcgacatgga gggagctgct ttgctgagag tctctgtcct ctgcatctgg  | 360  |
| atgagtgcac ttttctcttg tgtgggagtg agggcagagg aagctggagc gagggtgcaa  | 420  |
| caaaaacttc caagtgggac agatactgga gatcctcaaa gtaagccctt cggtgactgg  | 480  |
| gctgctggca ccatggaccc agagagcagt atctttattg aggatgccat taagtatttc  | 540  |
| aaggaaaaag tgagcacaca gaatctgcta ctctgctga ctgataatga ggccctggaac  | 600  |
| ggattctgtg ctgctgctga actgccagg aatgaggcag atgagctccg taaagctctg   | 660  |
| gacaaccttg caagacaaat gatcatgaaa gacaaaaact ggacacgata aggccagcag  | 720  |
| tacagaaact ggtttctgaa agagtttcct cggttgaaaa gtgagcttga ggataacata  | 780  |
| agaaggctcc gtgcccttgc agatgggggt cagaagggtc acaaaaggac caccatcgcc  | 840  |
| aatgtggtgt ctggctctct cagcatttcc tctggcatcc tgaccctcgt cggcatgggt  | 900  |
| ctggcaccct tcacagaggg aggcagcctt gtactcttgg aacctgggat ggagtggga   | 960  |
| atcacagccg ctttgaccgg gattaccagc agtaccatgg actacggaaa gaagtgggtg  | 1020 |
| acacaagccc aagcccacga cctggctcat aaaagccttg acaaatgaa ggaggtgagg   | 1080 |
| gagtttttgg gtgagaacat atccaacttt ttttcttag ctggcaatac ttaccaactc   | 1140 |
| acacgaggga ttgggaagga catccgtgcc ctgagacgag ccagagccaa tcttcagtca  | 1200 |
| gtaccgcatg cctcagcctc acgcccccg gtcactgagc caatctcagc tgaaagcggg   | 1260 |
| gaacaggttg agagggttaa tgaaccagc atcctggaaa tgagcagagg agtcaagctc   | 1320 |
| acggatgttg cccctgtaag cttctttctt gtgctggatg tagtctacct cgtgtacgaa  | 1380 |
| tcaaagcact tacatgaggg ggcaaagtca gagacagctg aggagctgaa gaagtggt    | 1440 |
| caggagcttg aggagaagct aaacattctc aacaataatt ataagattct gcaggcggac  | 1500 |
| caagaactgt gaccacaggg cagggcagcc accaggagag atatgcctgg caggggccag  | 1560 |
| gacaaaatgc aaactttttt tttttctga gacagagtct tgctctgtcg ccaagttgga   | 1620 |
| gtgcaatggt gcgcatctag ctcaactgcaa gctctgcctc ccgtgttcaa gcgattctcc | 1680 |
| tgccttggcc tcccaagtga ctgggactac aggcgcctac caccatgccc agctaatttt  | 1740 |
| tgtattttta atagagatgg ggtttcacca tgttgccag gatggtctcg atctctgac    | 1800 |
| ctcttgatct gcccaacttg gcctcccaaa gtgctgggat tacaggcgtg agccatcgct  | 1860 |
| tttgacccaa atgcaaacat tttattaggg ggataaagag ggtgaggtaa agtttatgga  | 1920 |
| actgagtggt agggactttg gcatttccat agctgagcac agcaggggag gggttaatgc  | 1980 |



```

agatggcagt gcagcaagga gaaggcagga acattggagc ctgcaataag ggaaaaatgg 2040
gaactggaga gtgtggggaa tgggaagaag cagtttactt tagactaaag aatataattgg 2100
ggggccgggt gtagtggctc atgcctgtaa tccgagcact ttgggaggcc aaggcgggcg 2160
gatcacaggg tcaggagatc gagaccatcc tggctaacc agtgaaaccc cgtctctact 2220
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```

<210> 121

<211> 2759

<212> DNA

<213> NM\_080796.1| Homo sapiens death associated transcription factor 1 (DATF1), transcript variant 2, mRNA

```

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gcgagacct agaggctcgc ggctcgga gcttactcca cggaacagc ctctagataa 120
tctgattgt tgaaaaatag aagcctgtta ctctgaaca gtggctgaca acagtgtgt 180
tgtgagcctg gctgtctgct tggaccaga ggttctctc gccagggttt ttggtgttat 240

```

|   |      |
|---|------|
| ttaggatttc agggaaaagt gtccaagctt tcagtgttgg agcaggtatg gacgacaaag   | 300  |
| gcgacccgag caatgaggag gcacctaaagg ccatcaaacc caccagcaaa gaggttcagga | 360  |
| aaacatgggg ttttcgaagg accactatcg ccaagcgaga gggcgagggg gacgcggagg   | 420  |
| ctgaccact ggagccgcca cccccacagc agcagctggg cctgtccctg cggcgcgatg    | 480  |
| ggaggcgacc caagcgcaact gagcgctgg agcagttcct gaccattgcg cggcgccgcg   | 540  |
| gcaggaggag catgctgtgc tccctggagg attctggtga gccaccgtcc tgccccgcca   | 600  |
| cagacgcca gacagcctcc gagggcagcg tggaaaagcgc ttctgagacc agaagcgccc   | 660  |
| cccagttctgc ttccacagct gtgaaggaaac gaccagcctc ttctgaaaag gtgaaaggag | 720  |
| gggatgacca cgatgacacc tccgatagtg acagcgatgg cctgaccttg aaagagcttc   | 780  |
| agaatcgctt tcgcaggaag cgggaacagg agccactga gaggccccgt aaagggatcc    | 840  |
| agagtcgctt cgggaagaag cgccgggagg aggggtcccg cgagactgtg ggctccgagg   | 900  |
| ccagtgaac tgtggagggc gtctgcccc gtaagcagga gcccgagaaat gatcaggggg    | 960  |
| ttgtgtcccc ggctgggaaa gatgacagag agagtaagtt ggagggaaaag gcggctcagg  | 1020 |
| acatcaaaga tgaggagcct ggagacttgg gccgaccgaa gcctgaatgt gagggttacg   | 1080 |
| accccaacgc cctgtattgc atttgcgcgc agcctcacia caacagggtt atgatttgct   | 1140 |
| gtgaccgctg tgaagaatgg tttcatggcg attgtgtggg cattttctag gctcgaggga   | 1200 |
| ggcttttga aaggaatggg gaagactata tctgccccaa ctgcaccatt ctgcaagtgc    | 1260 |
| aggatgagac tcattcagaa acggcagatc agcagggaagc taaatggaga cctggagatg  | 1320 |
| ctgatggcac cgattgtaca agtataggaa caatagagca gaagtctagc gaagaccaag   | 1380 |
| ggataaaggg tagaattgag aaagctgcaa atccaagtgg caagaagaaa ctcaagatct   | 1440 |
| tccagcctgt gatagaggcg cctggtgect caaaatgtat tggccccggg tgcgtgcacg   | 1500 |
| tggcgagcc cgactcgggt tactgcagta atgactgtat cctcaaacac gccgcagcga    | 1560 |
| caatgaagtt tctaagctca ggtaaagaac agaagccaaa gcctaaagaa aagatgaaga   | 1620 |
| tgaagccaga gaagcccagt cttccgaaat cgggtgctca ggcaggtatt aaaatctctt   | 1680 |
| ctgtgcacaa gagaccagct ccagaaaaaa aagagaccac agtgaagaag gcagtgggtg   | 1740 |
| tccctgcgcg gagtgaagca ctccgggaag aagcagcttg tgagagcagc acgccgtcgt   | 1800 |
| ggcgagcgca tcacaattac aatgcagtaa agccagaaaa gactgctgct cctcgcgct    | 1860 |
| cactgttgta taaatgtatg tatcacctag gggttggcct cctggacccc tcccgttctt   | 1920 |

|            |             |            |             |            |            |      |
|------------|-------------|------------|-------------|------------|------------|------|
| tctggatagc | catccccctgg | gcctgtccag | gactgggagtg | tgcagctttg | tgtaaagctg | 1980 |
| atcacagaca | ccggctgcac  | catcagcggg | aagcagagcc  | catgtccagg | atgcctctg  | 2040 |
| ctgccctgtg | tccatcccta  | gtctgtcagg | acttctctgc  | actgttttcc | aaagctgtaa | 2100 |
| acctcactgg | tgaacgttca  | ccttaatgat | tgattcttta  | atctctgttt | tcactctcag | 2160 |
| gctctggtaa | gtattcgtat  | tctcttcate | ccagtcgtat  | tgcatagcca | cactgcccgg | 2220 |
| cacgccacat | ccaccctgt   | ctgcacatga | gttgttctga  | caacagcgct | gtatacgctt | 2280 |
| cagtttttcc | acattgtcca  | cggccagcac | atgaaagcat  | cacttctttt | ttatgttgtg | 2340 |
| ggaatctttg | caagttagtg  | ttgcatctga | ttttcaggtg  | tacatttatt | tttgactggg | 2400 |
| cagatagggg | attttttttt  | ttccatgtcc | gattcacacg  | ctacacaccc | acatgaacac | 2460 |
| attcgaactt | cgaaggccac  | acactcctgc | ttcataggcc  | ccacggtaag | tgagttcaca | 2520 |
| cctagaacac | tgctctgacc  | gcaggacgcg | tgcttgggac  | ttggtattct | acatgtgact | 2580 |
| ggctttcttg | ccctcgtctc  | ttgaatgttt | agactcttaa  | gatcatatcc | tgccccaat  | 2640 |
| ttcaaatata | tgaatatgaag | atatctcaaa | cagatctttg  | aaacctcaga | ttctgtggtg | 2700 |
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<210> 122

<211> 781

<212> DNA

<213> NM\_177953.1| Homo sapiens dynein, cytoplasmic, light polypeptide 2A (DNCL2A), transcript variant 2, mRNA

|            |   |
|------------|---|
| <400> 122  |   |
| cgcagaaagg | cacaggactc gctaagtgtt cgctacgcgg ggctaccgga tcggtcggaa 60   |
| atggctgaag | tggagagatc gcctgagccc aggaggtcaa ggctacagtg agccgtgact 120  |
| gcaccactgc | actccacctc gggcagaggt ggaggagaca ctgaagcgac tgcagagcca 180  |
| gaagggagtg | cagggaaatca tcgtcgtgaa cacagaaggc attcccatca agagcaccat 240 |
| ggacaacccc | accaccacco agtatgccag cctcatgcac agcttctacc tgaaggcacg 300  |
| gagcaccggt | cgtgacatcg acccccagaa cgatctcacc ttcttctgaa ttctgtccaa 360  |
| gaaaaatgaa | attatggttg caccagataa agactatttc ctgatttgta ttcagaatcc 420  |
| aaccgaataa | gccactctct tggctccctg tgctattctc taatttaaat ccccccaaga 480  |

|   |     |
|---|-----|
| atgttaatgt caatcatgtc agtggactag cacatggcag tcgcttggaa cccactcaca | 540 |
| ccaatccagt gaccgtgtgt gggctggcgg ctcttctccc ccaccaacgg aaccctgtg  | 600 |
| tgcaccaacc ttccccagag ctccggagcg ccctctcttc acttccaggt ttggagcaa  | 660 |
| gagcttgca gaaagccgca ccagcttcc ttctgacctt cagttcactt tgctgccctt   | 720 |
| ggagaaagct gtttttcttt aactaaaaat aacccaaatg cttaaaaaaa aaaaaaaaaa | 780 |
| a   | 781 |

<210> 123

<211> 841

<212> DNA

<213> NM\_022873.1| Homo sapiens interferon, alpha-inducible protein (clone IFI-6-16) (G1P3), transcript variant 3, mRNA

|   |     |
|---|-----|
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| cttctctcct ccaaggtcta gtgacggagc ccgcgcgcgg cgccaccatg cggcagaagg | 120 |
| cggtatcgct tttcttggtc tacctgctgc tcttcacttg cagtggggtg gaggcaggtg | 180 |
| agaatgcggg taaggatgca ggtaagaaaa agtgctcgga gagctcgagc agcggctccg | 240 |
| ggttttgcaa ggcctgaco ttcattggcg tcggaggagg actgcagtc gccgggctgc   | 300 |
| ccgcgctggg cttcaccggc gccggcatcg cgcccaactc ggtggctgcc tcgctgatga | 360 |
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| acgccaccga caagtatctc gatagtggag aggatgagga gtatgccaga gtccacagaa | 540 |
| cctcttcttc cttcttggcc taactcttcc agttaggatc tagaaatttg cttttttttt | 600 |
| tttttttttt tttttttgag atgggttctc actatattgt ccaggctaga gtgcagtggc | 660 |
| tattcacaga tgcgaacata gtacactgca gcctccaact cctagcctca agtgatcctc | 720 |
| ctgtctcaac ctcccaagta ggattacaag catgcgccga cgatgccagc aatccagaac | 780 |
| tttgtctatc actctcccca acaacctaga tgtgaaaaca gaataaactt caccacagaa | 840 |
| a   | 841 |

<210> 124

<211> 4652

<212> DNA

<213> NM\_183047.1| Homo sapiens protein kinase C binding protein 1 (PRKCBP1), transcript variant 1, mRNA

<400> 124

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| atggatatct ctactcgctc caaagatcct ggctctgcag agagaacagc ccagaaaaga    | 180  |
| aagttcccca gccctccaca ttcttccaat ggccactcgc cgcaggagac atcaacaagc    | 240  |
| cccattaaaa agaaaaagaa acctggctta ctgaacagta acaataagga gcagtcagaa    | 300  |
| ctaagacatg gtccgtttta ctatatgaag cagccactca ccacagaccc tgttgatgtt    | 360  |
| gtaccgcagg atggacggaa tgattttctac tgcctggggtt gtcaccggga aggccaaagtc | 420  |
| ctttgctgtg agctctgtcc ccgggtttat cgcgctaagt gtctgagact gacatcgga     | 480  |
| ccagaggggg actgggtttg tctgaaatgt gagaaaatta cagtagcaga atgcatcgag    | 540  |
| accocagagta aagccatgac aatgctcacc attgaacagt taccctacct gctcaagttt   | 600  |
| gccattcaga aaatgaaaca gccagggaca gatgcattcc agaagccctg tccattggaa    | 660  |
| cagcacctcg actatcgcca atacatotto catccaatgg acctttgtac attggaaaag    | 720  |
| aatgcgaaaa agaaaaatgta tggctgcaca gaagccttcc tggctgatgc aaagtggatt   | 780  |
| ttgcacaact gcatcattta taatggggga aatcacaaat tgacgcaaat agcgaagata    | 840  |
| gtcatcaaaa tctgtgaaca tgagatgaat gaaatcgaag tatgtccaga atgttatcta    | 900  |
| gctgcttgcc aaaaacgaga taactgggtt tgtgagcctt gtgacaaacc acatcctttg    | 960  |
| gtctgggcca aactgaaggg gtttcatttc tgccctgcaa aagctctaag ggataaagac    | 1020 |
| gggcaggctg atgcccattt ctttgacaaa catgacaggg cctgggttcc aataaataat    | 1080 |
| tgctacctca tgtctaagaa aattcctttt tctgtgaaaa agactaagag catcttcaac    | 1140 |
| agtgccatgc aagagatgga gggttacgtg gagaacatcc gcaggaaagt tgggggtttt    | 1200 |
| aattactctc catttaggac accctacaca cccaacagcc agtatcaaat gctgtcgat     | 1260 |
| cccaccaacc ccagcgcggg cactgccaag atagacaagc aggagaaggt caagctcaac    | 1320 |
| tttgacatga cggcatcccc caagatcctg atgagcaagc ctgtgtcgag tgggggcaca    | 1380 |

|             |             |             |             |            |             |      |
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<211> 3217

<212> DNA

<213> NM\_017452.1| Homo sapiens stauferin, RNA binding protein (Drosophila) (STAU), transcript variant T2, mRNA

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3217

<210> 126

<211> 3506

<212> DNA

<213> NM\_017453.1| Homo sapiens staufer, RNA binding protein (Drosophila) (STAU), transcript variant T3, mRNA

<400> 126

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<210> 127

<211> 4538

<212> DNA

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| cagaaggaca | cagcccgctc | tcccctgect | gcctgattcc | atggctgttg | tgctgattcc | 4260 |
| aatgctttca | cgttgggttc | tggcgtggga | actgctctcc | tttgcagccc | catttcccaa | 4320 |
| gctctgttca | agttaaactt | atgtaagctt | tccgtggcat | gcggggcgcg | caccacagtc | 4380 |
| cccgcgtcgt | aagactctgt | atttggatgc | caatccacag | gcctgaagaa | actgcttgtt | 4440 |
| gtgtatcagt | aatcattagt | ggcaatgatg | acattctgaa | aagctgcaat | acttatataa | 4500 |
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| cggacagtct | cctgcgaaac  |
| cagcggagct | ggagtttgtt  |
| 120        |             |
| cagatcatca | tcactgtggt  |
| ggtgatgatg | gtgatggttg  |
| tggtgatcac | gtgcctgctg  |
| 180        |             |
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| acggctcctc | atcagccggc  |
| acagccaggg | gcggaggaga  |
| 240        |             |
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| ctacgccccg | cctcggccca  |
| ccgaccgcct | ggccgtgccg  |
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| cttccaccgc | ttccagccca  |
| cctatccgta | cctgcagcac  |
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| catctcgtct | tcagacgggg  |
| aggagccccc | accctaccag  |
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| tcgggacccc | gagcagcagc  |
| tggaaatgaa | ccgggagtcg  |
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| aaccattctt | gacagtgacc  |
| tgatggatag | tgccaggctg  |
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| 720        |             |
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| cagtgggccg | ccctccttgc  |
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| agagagcgca | gccatctgga  |
| gcaaaagaaa | ggataaacag  |
| 840        |             |
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| tccccagggg | ggccgggctg  |
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| 900        |             |

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| tcgtgtggcc  | ctccccctcc  | acctccctgt  | gtataaatat  | ttacatgtga  | tgtctggctc | 1020 |
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| gacagggtat  | caccacgtta  | tatatccctt  | accgaaggag  | acaccccttc  | ccccctgacc | 1740 |
| cagaacagcc  | tttaaatcac  | aagcaaaata  | ggaaagttaa  | ccacggaggc  | accgagttcc | 1800 |
| aggtagtggt  | tttgcccttc  | ccaaaaatga  | aaataaaactg | ttaccgaagg  | aattagtttt | 1860 |
| tcctcttctt  | ttttccaaact | gtgaagggtc  | ccgtgggggtg | gagcatgggtg | ccctccacaa | 1920 |
| gccgcagcgg  | ctggtgcccg  | ggctaccagg  | gacatgccag  | agggctcgat  | gacttgtctc | 1980 |
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| ccttttgctg aaatatcagt tactgaacag gcaggccact ttgcctctaa attacctctg  | 1740 |
| ataattctag agattttacc atattttotaa actttgttta taactctgag aagatcatat | 1800 |
| ttatgtaag tatatgtatt tgagtgcaga atttaataa ggctctacct caaagacctt    | 1860 |
| tgcacagttt attgggtgtca tattatacaa tttttcaatt gtgaattcac atagaaaaa  | 1920 |
| ttaaattata atgtttgact attatatatg tgtatgcatt ttactggctc aaaactacct  | 1980 |
| actctttctc caggcatcaa aagcattttg agcaggagag tattactaga gctttgccac  | 2040 |
| ctctccattt ttgccttggt gctcatotta atggccta atgcacccaa acatggaaat    | 2100 |
| atcaccaaaa aatacttaat agtccaccaa aaggcaagac tgcccttaga aattctagcc  | 2160 |
| tggtttggag atactaactg ctctcagaga aagtagcttt gtgacatgtc atgaaccat   | 2220 |
| gtttgcaatc aaagatgata aaatagattc ttatttttcc cccacccccg aaaatgttca  | 2280 |
| ataatgtccc atgtaaaacc tgcatacaat ggcagcttat acatagcaat ggtaaaatca  | 2340 |
| tcatctggat ttaggaaattg ctcttgctat acccccaagt ttctaagatt taagattctc | 2400 |
| cttactacta tctacggtt aaatatcttt gaaagtttgt attaaatgtg aattttaaga   | 2460 |
| aataatattt atatttctgt aaatgtaaac tgtgaagata gttataaact gaagcagata  | 2520 |
| cctggaacca cctaaagaac ttccatttat ggaggatttt ttggccctt gtgtttggaa   | 2580 |
| ttataaaata taggtaaaag tacgtaatta aataatgttt ttggtaaaaa aaaaaaaaaa  | 2640 |
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<211> 2730

<212> DNA

<213> NM\_152872.1| Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 3, mRNA

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ccatttatgg aggatttttt tgccccttgt gtttgaatt ataaaaataa ggtaaaagta 2640
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<210> 131

<211> 2563

<212> DNA

<213> NM\_152874.1| Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 8, mRNA

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tctcgcgcaa gagtgcacac cagggtgttc aagacgcttc tggggagtga gggaaagcgt 180  
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gacctctcta cctctggttc ttacgtctgt tgctagatta tcgtccaaaa gtgttaatgc 420  
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gactcagaac ttggaaggcc tgcacatga tggccaattc tgccataagc cctgtcctcc 540  
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ccaagaaggg aaggagtaca cagacaaagc ccatttttct tccaaatgca gaagatgtag 660  
atttgtgtgat gaaggacatg atgtgaacat ggaatcatca aggaatgcac actcaccagc 720  
aacaccaagt gcaaaaggga aggatccaga tctaacttgg ggtggccttg tcttctctct 780  
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gagtaaatat atcaccacta ttgctggagt catgacacta agtcaagtta aaggctttgt 900  
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gaaatatcag ttactgaaca ggcaggccac ttgtcctcta aattacctct gataattcta 1620  
gagattttac catattttta aactttgttt ataactctga gaagatcata ttatgtataa 1680

|            |            |             |            |             |             |      |
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| gtatatgtat | ttgagtcgag | aatttaaata  | aggctctacc | tcaaagacct  | ttgcacagtt  | 1740 |
| tattggtgtc | atattatata | atatttcaat  | tgtgaattca | catagaaaac  | attaaattat  | 1800 |
| aatgtttgac | tattatatat | gtgtatgcat  | tttactggct | caaaactacc  | tacttctttc  | 1860 |
| tcaggcatca | aaagcatttt | gagcaggaga  | gtattactag | agctttgcca  | cctctccatt  | 1920 |
| tttgcccttg | tgctcatctt | aatggcctaa  | tgacccccca | aacatggaaa  | tatcaccaaa  | 1980 |
| aaataactta | tagtccacca | aaaggcaaga  | ctgcccttag | aaattctagc  | ctggtttgga  | 2040 |
| gatactaact | gctctcagag | aaagtagctt  | tgtgacatgt | catgaaccca  | tgtttgcaat  | 2100 |
| caaagatgat | aaaatagatt | cttatttttc  | ccccaccccc | gaaaatgttc  | aataatgtcc  | 2160 |
| catgtaaaac | ctgctacaaa | tggcagctta  | tacatagcaa | tggtaaaatc  | atcatctgga  | 2220 |
| tttaggaatt | gctcttgtoa | taccccccaag | tttctaagat | ttaagattct  | ccttactact  | 2280 |
| atcctacgtt | taaatatctt | tgaaggtttg  | tattaaatgt | gaatttttaag | aaataatatt  | 2340 |
| tatatctctg | taaaatgtaa | ctgtgaagat  | agttataaac | tgaagcagat  | acctggaacc  | 2400 |
| acctaaagaa | cttccattta | tggaggattt  | ttttgccctt | tgtgtttgga  | attataaaaat | 2460 |
| ataggtaaaa | gtacgtaatt | aaataatgtt  | tttggtaaaa | aaaaaaaaaa  | aaaaaaaaaa  | 2520 |
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<210> 132

<211> 2445

<212> DNA

<213> NM\_152876.1| Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 6, mRNA

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| ccagcgaggc  | ttccttccca | tctctctgac  | cacgggggct | ttctgtgagc  | tcgtctctga  | 120 |
| tctcgcgcaa  | gagtgacaca | caggtgttca  | aagacgcttc | tggggagtgta | gggaagcggt  | 180 |
| ttacgagtga  | cttggcttga | gcctcagggg  | cgggcactgg | cacggaacac  | acctgagggc  | 240 |
| cagccctggc  | tgcccaggcg | gagctgcctc  | ttctccgcgc | ggttggttga  | ccgcctcagt  | 300 |
| acggagttgg  | ggaagctctt | tcacttcgga  | ggattgctca | acaacctgc   | tgggcatctg  | 360 |
| gacctccta   | cctctggttc | ttacgtctgt  | tgctagatta | tcgtccaaaa  | gtgttaaatgc | 420 |

|   |      |
|---|------|
| ccaagtgact gacatcaact ccaagggatt ggaattgagg aagactgtta ctacagttdga  | 480  |
| gactcagaac ttggaaggcc tgcacatcat tgcccaattc tgccataagc cctgtcctcc   | 540  |
| agatgtgaac atggaatcat caaggaatgc aactcacca gcaacaccaa gtgcaaaagag   | 600  |
| gaagtgaaga gaaaggaagt acagaaaaca tgcagaaaagc acagaaaagga aaaccaaggt | 660  |
| tctcatgaat ctccaaacct aaatcctgaa acagtggcaa taaatttacc tgatgttgac   | 720  |
| ttgagtaaata ataccaccac tattgtctgga gtcacatgac taagtcaagt taaaggcttt | 780  |
| gttcgaaaaa atggtgtcaa tgaagccaaa atagatgaga tcaagaatga caatgtccaa   | 840  |
| gacacagcag aacagaaaagt tcaactgctt cgtaattggc atcaacttca tggaaagaaa  | 900  |
| gaagcgtatg acacattgat taaagatctc aaaaaagcca atctttgtac tcttgacagag  | 960  |
| aaaattcaga ctatcatcct caaggacatt actagtgtgact cagaaaattc aaacttcaga | 1020 |
| aatgaaatcc aaagcttggt ctagagtga aaacaacaaa ttcagtcttg agtatatgca    | 1080 |
| attagtgttt gaaaagattc ttaatatgctg gctgtaaata ctgcttggtt ttttactggg  | 1140 |
| tacattttat catttattag cgctgaagag ccaacatatt tgtagatttt taatatctca   | 1200 |
| tgattctgcc tccaaggatg tttaaaatct agttgggaaa acaaaacttca tcaagagtaa  | 1260 |
| atgcagtgcc atgctaagta cccaaatagg agtgtatgca gaggatgaaa gattaagatt   | 1320 |
| atgctctgcc atctaacata tgattctgta gtatgaatgt aatcagtgtg tgttagtaca   | 1380 |
| aatgtctatc caoaggctaa ccccaactota tgaatcaata gaagaagcta tgaccttttg  | 1440 |
| ctgaaatata agttactgaa caggcaggcc actttgcctc taaattacct ctgataattc   | 1500 |
| tagagatttt accatatttc taaactttgt ttataactct gagaagatca ttttatgta    | 1560 |
| aagtatatgt atttgagtgc agaattttaa taaggctcta cctcaaagac ctttgacag    | 1620 |
| tttattggtg tcatattata caatatttca attgtgaatt cacatagaaa acattaaatt   | 1680 |
| ataatgtttg actattatat atgtgtatgc attttactgg ctcaaaacta cctacttctt   | 1740 |
| tctcaggcat caaaagcatt ttgagcagga gagtattact agagctttgc cactctcca    | 1800 |
| tttttgccct ggtgctcatc ttaatggcct aatgcacccc caaacatgga aatatcacca   | 1860 |
| aaaaatactt aatagtcac caaaaggcaa gactgccctt agaatttcta gcctggtttg    | 1920 |
| gagatactaa ctgctctcag agaaagtagc ttgtgacat gtcacgaacc catgtttgca    | 1980 |
| atcaaagatg ataaaaataga ttcttatttt tccccacccc ccgaaaatgt tcaataatgt  | 2040 |
| cccatgtaaa acctgctaca aatggcagct tatcacatagc aatggtaaaa tcatcatctg  | 2100 |
| gatttaggaa ttgctcttgt cataccoccc agtttctaag atttaagatt ctcttacta    | 2160 |



|  |      |
|--|------|
| ctatcctacg tttaaatata tttgaaagt tgtattaaat gtgaatttta agaaataata   | 2220 |
| tttatatttc tgtaaatgta aactgtgaag atagtataaa actgaagcag atacctggaa  | 2280 |
| ccacctaaag aacttccatt tatggaggat ttttttgccc ctgtgttttg gaattataaa  | 2340 |
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<210> 133

<211> 2508

<212> DNA

<213> NM\_152877.1 Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 7, mRNA

|  |      |
|--|------|
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| tctcgcgcaa gagtgcaca cagggttca aagacgcttc tggggagtga gggaagcggt    | 180  |
| ttacgagtga cttggctgga gctcagggg cgggcactgg cacggaacac accctgaggc   | 240  |
| cagecctggc tgcccaggcg gagctgcctc ttctcccgcg ggttggtgga ccgctcagt   | 300  |
| acggagttgg ggaagctctt tcaactcgga ggattgctca acaaccatgc tgggcatctg  | 360  |
| gacctctcta cctctggttc ttacgtctgt tgctagatta tcgtccaaaa gtgttaatgc  | 420  |
| ccaagtgact gacatcaact ccaagggatt ggaattgagg aagactgtta ctacagttga  | 480  |
| gactcagaac ttggaaggcc tgcacatga tggccaatto tgccataagc cctgtcctcc   | 540  |
| agatgtgaac atggaatcat caaggaatgc aactcacca gcaacaccaa gtgcaagag    | 600  |
| gaaggatcca gatctaactt ggggtggctt tgtctcttcc ttttgccaat tccactaatt  | 660  |
| gtttgggtga agagaaagga agtacagaaa acatgcagaa agcacagaaa ggaacacaa   | 720  |
| ggttctcatg aatctccaac cttaaatcct gaaacagtgg caataaattt atctgatgtt  | 780  |
| gacttgagta aatatatcac cactattgct ggagtcata cactaagta agttaaaagg    | 840  |
| tttgttcgaa agaattggtgt caatgaagcc aaaaatagat agatcaagaa tgacaatgtc | 900  |
| caagacacag cagaacagaa agttcaactg ctctcgtaatt ggcatcaact tcatggaaag | 960  |
| aaagaagcgt atgacacatt gattaaagat ctcaaaaaag ccaatctttg tactcttgc   | 1020 |

|   |      |
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| gagaaaattc agactatcat cctcaaggac attactagtg actcagaaaa ttcaaacttc   | 1080 |
| agaaatgaaa tccaaagcctt ggtctagagt gaaaaacaac aaattcagtt ctgagtatat  | 1140 |
| gcaattagtg tttgaaaaga ttcttaatat ctggctgtaa atactgcttg gttttttact   | 1200 |
| gggtacattt tatcatttat tagcgtgaa gagccaacat attttagatg ttttaataac    | 1260 |
| tcatgattct gcotccaagg atgtttaaaa tctagttggg aaaacaaact toatcaagag   | 1320 |
| taaatgcagt ggcattgctaa gtacccaaat aggagtgtat gcagaggatg aaagattaag  | 1380 |
| attatgctct ggcattctaac atatgattct gtagtatgaa tgtaatcagt gtatgttagt  | 1440 |
| acaaatgtct atccacaggo taaccccoact ctatgaatca atagaagaag ctatgacctt  | 1500 |
| ttgctgaaat atcagttact gaacaggcag gccactttgc ctctaaatta cctctgataa   | 1560 |
| ttctagagat tttaccatat ttctaaaact tgtttataac tctgagaaga tcataattat   | 1620 |
| gtaaagtata tgtatttgag tgcagaattt aaataaggct ctacotcaaa gacctttgca   | 1680 |
| cagtttattg tgttcatatt atacaatatt tcaattgtga attcacatag aaaacattaa   | 1740 |
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| ctttctcagg catcaaaaago attttgagca ggagagtatt actagagctt tgccacctct  | 1860 |
| ccatttttgc cttgggtgctc atcttaattg cctaattgcac ccccaaacat ggaatatca  | 1920 |
| ccaaaaata cttaatagtc caccaaaagg caagactgcc cttagaaaat ctagcctggt    | 1980 |
| ttggagatac taactgctct cagagaaagt agctttgtga catgtcatga acccatgttt   | 2040 |
| gcaatcaaag atgataaaaat agattcttat ttttccccc ccccccgaaa tgttcaataa   | 2100 |
| tgtcccatgt aaaacctgct acaaatggca gcttatacat agcaatggta aaatcatcat   | 2160 |
| ctggatttag gaattgctct tgtcatacc ccaagtttct aagatttaag attctcctta    | 2220 |
| ctactatctc acgttttaaa atctttgaaa gtttgtatta aatgtgaatt ttaagaaata   | 2280 |
| atattttata ttctgtaaat gtaaaactgtg aagatagtta taaactgaag cagataacctg | 2340 |
| gaaccacctc aagaacttcc atttatggag gatttttttg ccccttgtgt ttggaattat   | 2400 |
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<210> 134

<211> 2583

<212> DNA

<213> NM\_152875.1| Homo sapiens tumor necrosis factor receptor superfamily, member 6 (TNFRSF6), transcript variant 5, mRNA

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ttacgagtga cttggctgga gctcagggg cgggcactgg caggaacac accctgaggc 240
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caacttcctg gaaagaaaga agcgtatgac acattgatta aagatctcaa aaaagccaat 1080
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gaaaattcaa acttcagaaa tgaatccaa agcttggtct agagtgaata acaacaaatt 1200
cagttctgag tatatgcaat tagtgtttga aaagattctt aatagctggc tgtaaatact 1260
gcttggtttt ttactgggta cattttatca tttattagcg ctgaagagcc aacatatttg 1320
tagattttta atatctcatg attctgcctc caaggatgtt taaatcttag ttgggaaaac 1380
aaacttcctc aagagtaaat gcagtggcat gctaagtacc caaataggag tgtatgcaga 1440
ggatgaaaag ttaagattat gctctggcat ctaacatagc attctgtagt atgaatgtaa 1500

```

|  |      |
|--|------|
| tcagtgtatg ttagtacaaa tgtctatcca caggetaacc ccactctatg aatcaataga  | 1560 |
| agaagctatg accttttgcg gaaatatcag ttactgaaca ggcaggccac ttgcctcta   | 1620 |
| aattacctct gataattcta gagattttac catatttcta aactttgttt ataactctga  | 1680 |
| gaagatcata tttatgtaaa gtatatgtat ttgagtgacg aattttaata aggcctctacc | 1740 |
| tcaaagacct ttgcacagtt tattggtgtc atattatata atatttcaat tgtgaattca  | 1800 |
| catagaaaac attaaattat aatgtttgac tattatata gtgtatgcat ttactggct    | 1860 |
| caaaactacc tacttcttct tcaggcatca aaagcatttt gagcaggaga gtattactag  | 1920 |
| agctttgcca cctctccatt ttgccttgg tgctcatctt aatggcctaa tgcaccccca   | 1980 |
| aacatggaaa tatcaccaaa aaatacttaa tagtccacca aaaggcaaga ctgcccttag  | 2040 |
| aaattctagc ctggtttgga gatactaact gctctcagag aaagtgcgtt tgtgacatgt  | 2100 |
| catgaaccca tgtttgcaat caaagatgat aaaatagatt cttatttttc cccaccccc   | 2160 |
| gaaaaatgtc aataatgtcc catgtaaaac ctgctacaaa tggcagctta tacatagcaa  | 2220 |
| tggtaaaaac atcatctgga tttaggaatt gctcttgtca taccoccaag tttctaagat  | 2280 |
| ttaagattct ccttactact atcctacggt taaatatctt tgaagatttg tattaatgt   | 2340 |
| gaattttaag aaataatatt tatatttctg taaatgtaaa ctgtgaagat agttataaac  | 2400 |
| tgaagcagat acotggaacc acctaaagaa ctccattta tggaggattt ttttgccct    | 2460 |
| tgtgtttgga attataaaat ataggtaaaa gtacgtaatt aaataatgtt tttggtaaaa  | 2520 |
| aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  | 2580 |
| aaa  | 2583 |

<210> 135

<211> 316

<212> DNA

<213> >gi|13310411|gb|AF333388.1|AF333388 Homo sapiens metallothionein 1H-like protein mRNA, complete cds

|   |     |
|---|-----|
| <400> 135   |     |
| cctctctctc tctcgtttgg gaacgcoggt ctacactcgg cttgcaatgg accccaactg | 60  |
| ctcctgcgcc gctggaggct cctacgcctg cgccggctcc tgcaagtgca aaaagtgcaa | 120 |
| atgcacctcc tgcaagaaga gctgctgctc ctggtgcccc ctgggctgtg ccaagtgtgc | 180 |

|   |     |
|---|-----|
| ccagggctgc atccgcaaag gggcttcgga aaagtgcagc tgcgtgcct gatgtcggga  | 240 |
| ctgccctgct ctccgatgaa aacagaatga cacgtaaagt ccgggatttt tttttctaca | 300 |
| actccgactc atttgc   | 316 |

<210> 136

<211> 3145

<212> DNA

<213> NM\_000251. Homo sapiens mutS...[gi:4557760]

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|--|------|
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| gtttcgacat ggcggtgcag ccgaaggaga cgctgcagtt ggagagcgcg gccgaggtcg  | 120  |
| gcttcgtgcg cttctttcag ggcattgcgg agaagccgac caccacagtg cgccttttcg  | 180  |
| accggggcga cttctatacg gcgcacggcg aggacgcgct gctggccgcc cgggaggtgt  | 240  |
| tcaagaccga ggggggtgato aagtacatgg ggccggcagg agcaaagaat ctgcagagtg | 300  |
| ttgtgcttag taaaatgaat tttgaatctt ttgtaaaaga tcttctctctg gttcgtcagt | 360  |
| atagagtga agtttataag aatagagotg gaaataaggc atccaaggag aatgattggt   | 420  |
| atttggcata taaggcttct cctggcaato tctctcagtt tgaagacatt ctctttggtg  | 480  |
| acaatgatat gtcagcttcc attggtgttg tgggtgttaa aatgtccgca gttgatggcc  | 540  |
| agagacaggt tggagttggg tatgtggatt ccatacagag gaaactagga ctgtgtgaat  | 600  |
| tccctgataa tgatcagttc tccaatcttg aggcctctct catccagatt ggaccaaagg  | 660  |
| aatgtgtttt acccggagga gagactgctg gagacatggg gaaactgaga cagataattc  | 720  |
| aaagaggagg aattctgato acagaaagaa aaaaagctga cttttccaca aaagacattt  | 780  |
| atcaggacct caaccggttg ttgaaaggca aaaagggaga gcagatgaat agtgctgtat  | 840  |
| tgccagaaat ggagaatcag gttgcagttt catcactgtc tgcggtgaac aagtttttag  | 900  |
| aactcttata agatgattcc aactttggac agtttgaact gactactttt gacttcagcc  | 960  |
| agtatatgaa attggatatt gcagcagtcg gagcccttaa cttttttcag ggttctgttg  | 1020 |
| aagataccac tggctctcag tctctggctg ccttgcgtgaa taagtgtaaa acccctcaag | 1080 |
| gacaaagact tgtaaccag tggattaagc agcctctcat ggataagaac agaataaggg   | 1140 |
| agagattgaa tttagtggaa gctttttagt aagatgcaga attgaggcag actttacaag  | 1200 |

|             |             |             |             |             |             |      |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| aagatttact  | tcgctgatto  | ccagatctta  | accgacttgc  | caagaagttt  | caaagacaag  | 1260 |
| cagcaaactt  | acaagattgt  | taccgactct  | atcagggtat  | aaatcaacta  | cctaattgta  | 1320 |
| tacaggctct  | ggaaaaacat  | gaaggaaaac  | accagaaatt  | attgttggca  | gtttttgtga  | 1380 |
| ctcctcttac  | tgatcttcgt  | tctgacttct  | ccaagtttca  | ggaaatgata  | gaaacaactt  | 1440 |
| tagatatgga  | tcagggtgaa  | aaccatgaat  | tccttgtaaa  | accttcattt  | gattcctaac  | 1500 |
| tcagtgaatt  | aagagaaata  | atgaatgact  | tggaaaagaa  | gatgcagtca  | acattaataa  | 1560 |
| gtgcagccag  | agatcttggc  | ttggaccctg  | gcaaacagat  | taaactggat  | tcagtgcac   | 1620 |
| agtttgata   | ttactttcgt  | gtaacctgta  | aggaagaaaa  | agtccttcgt  | aacaataaaa  | 1680 |
| actttagtac  | tgtagatatc  | cagaagaatg  | gtgttaaatt  | taccaacagc  | aaattgactt  | 1740 |
| ctttaaatga  | agagtatacc  | aaaaataaaa  | cagaatatga  | agaagcccag  | gatgccattg  | 1800 |
| ttaagaaat   | tgccaatatt  | tcttcaggct  | atgtagaacc  | aatgcagaca  | ctcaatgatg  | 1860 |
| tgtagctca   | gctagatgct  | gttgctcagc  | ttgctcagct  | gtcaaatgga  | gcacctgttc  | 1920 |
| catatgtacg  | accagccatt  | ttggagaaag  | gacaagggaag | aattatatta  | aaagcatcca  | 1980 |
| ggcatgcttg  | tggtgaagtt  | caagatgaaa  | ttgcatttat  | tcctaattgac | gtatactttg  | 2040 |
| aaaaagataa  | acagatgttc  | cacatcatta  | ctggcccaca  | tatgggaggt  | aaatcaacat  | 2100 |
| atattcgaca  | aactgggggt  | atagtactca  | tggcccacaa  | tgggtgtttt  | gtgccatgtg  | 2160 |
| agtcagcaga  | agtgctccatt | gtggactgca  | tcttagcccg  | agtagggggt  | ggtgacagtc  | 2220 |
| aattgaaagg  | agtcctccag  | ttcatggctg  | aaatgttgga  | aactgcttct  | atcctcaggt  | 2280 |
| ctgcaaccaa  | agattcatta  | ataatcatag  | atgaattggg  | aagaggaaat  | tctacctacg  | 2340 |
| atggatttgg  | gttagcatgg  | gctatatcag  | aatacattgc  | aacaaagatt  | ggtgcttttt  | 2400 |
| gcattgtttg  | aacccatttt  | catgaacctta | ctgccttggc  | caatcagata  | ccaactgtta  | 2460 |
| ataatctaca  | tgtcacagca  | ctcaccactg  | aagagacott  | aactatgctt  | tatcagggtga | 2520 |
| agaaagggtg  | ctgtgatcaa  | agttttggga  | ttcatgttgc  | agagcttgct  | aatttcctca  | 2580 |
| agcatgtaat  | agagtgtgct  | aaacagaaag  | ccctggaact  | tgaggagtgt  | cagtatatgt  | 2640 |
| gagaatcgca  | aggatatgat  | atcatggaac  | cagcagcaaa  | gaagtgcata  | ctggaagagag | 2700 |
| agcaagggtga | aaaaattatt  | caggagtctc  | tgtccaaggt  | gaaacaaatg  | ccctttactg  | 2760 |
| aaatgtcaga  | agaaaacatc  | acaataaagt  | taaaacagct  | aaaagctgaa  | gtaatagcaa  | 2820 |
| agaataatag  | ctttgttaaa  | gaaatcattt  | cacgaataaa  | agttactacg  | tgaaaaatcc  | 2880 |

|   |      |
|---|------|
| cagtaatgga atgaaggtaa tattgataag ctattgtctg taatagtttt atattgtttt | 2940 |
| atattaaccc tttttccata gtgttaactg tcagtgccca tgggctatca acttaataag | 3000 |
| atatttagta atattttact ttgaggacat tttcaaagat ttttattttg aaaaatgaga | 3060 |
| gctgtaactg aggactgttt gcaattgaca taggcaataa taagtgtatg gctgaatttt | 3120 |
| ataaataaaa tcatgtagt tgtgg  | 3145 |

<210> 137

<211> 3239

<212> DNA

<213> NM\_000534. Homo sapiens PMS1...[gi:53729349]

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| ggactcagtg ccgcgctctc tgcacccgct ctgccgcgcg cgtgcgtgct gggcgagggt  | 120  |
| gcgggtgcgg ggttggggcct gcgcacggcg tgagacgctg gctgcttgcg gctagtggat | 180  |
| ggtaattgcc tgccctgcgc tagcaggaag ctgctctgtt aaaagcgaaa atgaacaat   | 240  |
| tgctgcggc aacagttcga ctcccttcaa gttctcagat catcactcg gtggtcagtg    | 300  |
| ttgtaaaaga gcttattgaa aactccttgg atgctggtgc cacaagcgta gatgttaaac  | 360  |
| tggagaacta tggatttgat aaaattgagg tgcgagataa cggggagggt atcaaggctg  | 420  |
| ttgatgcacc tgtaatggca atgaagtact acacctcaaa aataaatagt catgaagatc  | 480  |
| ttgaaaattt gacaacttac ggttttcgtg gagaagcctt ggggtcaatt tgtgtatag   | 540  |
| ctgaggtttt aattacaaca agaacggctg ctgataatt tagcaccag tatgttttag    | 600  |
| atggcagtg ccacatactt tctcagaaac ctccacatct tggtaacgtt acaactgtaa   | 660  |
| ctgctttaag attatttaag aatctacctg taagaaagca gttttactca actgcaaaaa  | 720  |
| aatgtaaaaa tgaaataaaa aagatccaag atctctcat gagctttggt atccttaaac   | 780  |
| ctgacttaag gattgtcttt gtacataaca aggcagttat ttggcagaaa agcagagtat  | 840  |
| cagatcacia gatggctctc atgtcagttc tggggactgc tgttatgaac aatatggaat  | 900  |
| cccttcagta ccactctgaa gaatctcaga tttatctcag tggatttctt ccaaagtggtg | 960  |
| atgcagacca ctctttcact agtctttcaa caccagaaag aagtttctac ttcataaaca  | 1020 |
| gtcgaccagt acatcaaaaa gatattctaa agttaatccg acatcattac aatctgaaat  | 1080 |

|  |      |
|--|------|
| gcctaaagga atctactcgt ttgtatcctg ttttctttct gaaaaatcgat gttcctacag   | 1140 |
| ctgatgttga tgtaaaattta acaccagata aaagccaagt attattacaa aataaggaat   | 1200 |
| ctgttttaat tgctcttgaa aatctgatga cgacttgtaa tggaccatta cctagtacaa    | 1260 |
| attcttatga aaataataaa acagatgttt ccgcagctga catcgctctt agtaaaacag    | 1320 |
| cagaacacga tgtgcttttt aataaagtgg aatcatctgg aaagaattat tcaaatgttg    | 1380 |
| atacttcagt cattccatto caaaatgata tgcataatga tgaatctgga aaaaacactg    | 1440 |
| atgattgttt aaatcaccag ataagtattg gtgacttttg ttatggtcat ttagtagtg     | 1500 |
| aaatttctaa cattgataaa aacactaaga atgcatttca ggacatttca atgagtaatg    | 1560 |
| tatcatggga gaactctcag acggaatata gtaaaacttg ttttataagt tccgttaagc    | 1620 |
| acccccagtc agaaaaatgg aataaagacc atatatagta gagtggggaa aatgaggaag    | 1680 |
| aagcaggtct tgaaaaactct tcggaaaattt ctgcagatga gtggagcagg ggaatatatac | 1740 |
| ttaaaaaatc agtgggagag aatattgaac ctgtgaaaat tttagtgcct gaaaaaagt     | 1800 |
| taccatgtaa agtaagtaat aataattatc caatccctga acaaatgaat cttaatgaag    | 1860 |
| attcatgtaa caaaaaatca aatgtaatag ataataaatc tggaaaaagt acagcttatg    | 1920 |
| atttacttag caatcgagta atcaagaaac ccattgtcagc aagtgcctct tttgttcaag   | 1980 |
| atcatcgctc tcagttttctc atagaaaaatc ctaagactag tttagaggat gcaaacactac | 2040 |
| aaattgaaga actgtggaag acattgagtg aagaggaaaa actgaaatat gaagagaagg    | 2100 |
| ctactaaaga cttggaacga tacaatagtc aaatgaagag agccattgaa caggagtcac    | 2160 |
| aaatgtcact aaaagatggc agaaaaaaga taaaaaccac cagcgcattg aatttggccc    | 2220 |
| agaagcacia gttaaaaaco tcattatcta atcaacccaa acttgatgaa ctcttcagt     | 2280 |
| cccaaatgta aaaaagaagg agtcaaaata ttaaaatggt acagatcccc ttttctatga    | 2340 |
| aaaacttaaa aataaatttt aagaacaaaa acaaagttag cttagaagag aaggatgaac    | 2400 |
| cttgcttgat ccacaatctc aggttttctg atgcatggct aatgacatcc aaacagagg     | 2460 |
| taatgttatt aaatccatat agagtagaag aagccctgct atttaaaaaa cttcttgaga    | 2520 |
| atcataaact tctgtcagag ccactggaaa agccaattat gttaacagag agtcctttta    | 2580 |
| atggatctca ttatttagac gttttatata aaatgacagc agatgaccaa agatacagtg    | 2640 |
| gatcaactta cctgtctgat cctcgtctta cagcgaatgg tttcaagata aaattgatac    | 2700 |
| caggagtttc aattactgaa aattacttgg aaatagaagg aatggctaatt tgtctcccat   | 2760 |



|   |      |
|---|------|
| tctatggagt agcagattta aaagaaatc ttaatgctat attaaacaga aatgcaaagg  | 2820 |
| aagtttatga atgtagacct cgcaaagtga taagtatttt agagggagaa gcagtgcgtc | 2880 |
| tatccagaca attacccatg tacttatcaa aagaggacat ccaagacatt atctacagaa | 2940 |
| tgaagcacca gtttggaat gaaattaaag agtgtgttca tggtcgccca ttttttcac   | 3000 |
| atttaaccta tcttcagaa actacatgat taaatatgtt taagaagatt agttaccatt  | 3060 |
| gaaattggtt ctgtcataaa acagcatgag tctggtttta aattatcttt gtattatgtg | 3120 |
| tcacatgggt attttttaaa tgaggattca ctgaactggt tttatatgga aaaaagttcc | 3180 |
| acgtattgta gaaaacgtaa ataaactaat atagactatt caaaaaaaaa aaaaaaaaa  | 3239 |

<210> 138

<211> 2771

<212> DNA

<213> NM\_000535. Homo sapiens PMS2...[gi:11125773]

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|--|-----|
| <400> 138  |     |
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| aaggccatca aacctattga tcggaagtca gtccatcaga tttgctctgg gcagggtgga  | 120 |
| ctgagtctaa gcactgcggt aaaggagtta gtagaaaaca gtctggatgc tggtgccact  | 180 |
| aattattgat taaagcttaa ggactatgga gtggatctta ttgaagtttc agacaatgga  | 240 |
| tgtggggtag aagaagaaaa cttcgaaggc ttaactctga aacatcacac atctaagatt  | 300 |
| caagagtttg ccgacctaac tcaggttgaa acttttggct ttcgggggga agctctgagc  | 360 |
| tcactttgtg cactgagcga tgtcaccatt tctacctgcc acgcatcgcc gaaggttgga  | 420 |
| actcgactga tgtttgatca caatgggaaa attatccaga aaacccccta ccccccccc   | 480 |
| agagggacca cagtcagcgt gcagcagtta tttccacac tacctgtgcg ccataaggaa   | 540 |
| tttcaaagga atattaagaa ggagtatgcc aaaaatgggcc aggtcttaca tgcatactgt | 600 |
| atcatttcag caggcatccg tgtaagttgc accaatcagc ttggacaagg aaaacgacag  | 660 |
| cctgtggtat gcacaggtag aagcccagc ataaaggaaa atatcggtcc tgtgtttggg   | 720 |
| cagaagcagt tgcaaaagct cattcctttt gttcagctgc ccctagtga ctccgtgtgt   | 780 |
| gaagagtacg gtttgagctg ttccgagctc ctgcataatc ttttttacat ctcaggtttc  | 840 |
| atttcacaat gcacgcattg agttggaagg agttcaacag acagacagtt tttctttatc  | 900 |

|             |             |             |             |            |             |      |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| aaccggcggc  | cttgtgaccc  | agcaaaggtc  | tgcagactcg  | tgaatgaggt | ctaccacatg  | 960  |
| tataatcgac  | accagtatcc  | atttgttggt  | cttaacattt  | ctgttgattc | agaatgcgtt  | 1020 |
| gatatcaatg  | tactccaga   | taaaaggcaa  | attttgctac  | aagaggaaaa | gcttttgttg  | 1080 |
| gcagttttta  | agacctcttt  | gataggaatg  | tttgatagtg  | atgtcaacaa | gctaaatgtc  | 1140 |
| agtcagcagc  | cactgtgtga  | tgttgaaggt  | aacttaataa  | aaatgcatgc | agcggatttg  | 1200 |
| gaaaagccca  | tggtagaaaa  | gcaggatcaa  | tcccttcatt  | taaggactgg | agaagaaaaa  | 1260 |
| aaagacgtgt  | ccatttccag  | actgcgagag  | gcctttttct  | ttcgtcacac | aacagagaac  | 1320 |
| aagcctcaca  | gcccaaagac  | tccagaacca  | agaaggagcc  | ctctaggaca | gaaaaggggt  | 1380 |
| atgctgtctt  | ctagcacttc  | aggtgccatc  | tctgacaaag  | gcgtcctgag | acctcagaaa  | 1440 |
| gaggcagtga  | gttcacgtca  | cggacccagt  | gacctacagg  | acagagcggg | gggtggagaag | 1500 |
| gactcggggc  | acggcagcac  | ttcctgtgat  | tctgaggggt  | tcagcatccc | agacacgggc  | 1560 |
| agtcactgca  | gcagcagtag  | tgcggccagg  | tcccaggggt  | acaggggctc | gcaggaaatc  | 1620 |
| gtggactctc  | aggagaaaag  | gcctgaaaat  | gacgactctt  | tttcagatgt | ggactgccat  | 1680 |
| tcaaaccagg  | aagataccgg  | atgtaaattt  | cgagttttgc  | ctcagccaac | taatctcgca  | 1740 |
| accccaaaaa  | caaacggttt  | taaaaaagaa  | gaaattcttt  | ccagttctga | catttgtcoa  | 1800 |
| aagttagtaa  | atactcagga  | catgtcagcc  | tctcaggttg  | atgtagctgt | gaaaattaat  | 1860 |
| aagaaagttg  | tgccccgtga  | cttttctatg  | agttctttag  | ctaaacgaat | aaagcagtta  | 1920 |
| catcatgaag  | cacagcaaaag | tgaaggggaa  | cagaattaca  | ggaagtttag | ggcaagattt  | 1980 |
| tgctctggag  | aaaatcaagc  | agccgaagat  | gaactaagaa  | aagagataag | taaaacgatg  | 2040 |
| tttgcagaaa  | tggaaatcat  | tggtcagttt  | aacctgggat  | ttataataac | caactgaat   | 2100 |
| gaggatatct  | tcatagtggg  | ccagcatgcc  | acggacgaga  | agtataactt | cgagatgctg  | 2160 |
| cagcagcaca  | ccgtgtctca  | ggggcagagg  | ctcatagcac  | ctcagactct | caacttaact  | 2220 |
| gctgttaatg  | aagctgttct  | gatagaaaat  | ctggaaatat  | ttagaagaaa | tggtcttgat  | 2280 |
| tttgttatcg  | atgaaaatgc  | tccagtcaact | gaaagggcta  | aactgatttc | cttgccaact  | 2340 |
| agtaaaaaact | ggacctctcg  | accccaggac  | gtcgtatgaac | tgatcttcat | gctgacgcac  | 2400 |
| agccctgggg  | tcatgtgcgc  | gccttcocga  | gtcaagcaga  | tgtttgcctc | cagagcctgc  | 2460 |
| cggaagtcgg  | tgatgattgg  | gactgctctt  | aacacaagcg  | agatgaagaa | actgatcacc  | 2520 |
| cacatggggg  | agatggacca  | cccctggaac  | tgtcccatg   | gaaggccaac | catgagacac  | 2580 |

|   |      |
|---|------|
| atcgccaacc tgggtgtcat ttctcagaac tgaccgtagt cactgtatgg aataattggt | 2640 |
| tttatcgag atttttatgt ttgtaaagac agagtcttca ctaacctttt ttgtttttaa  | 2700 |
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| cttttcaaac c  | 2771 |

<210> 139

<211> 4264

<212> DNA

<213> NM\_000179. Homo sapiens mutS...[gi:4504190]

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| cccaagtctc cggcgctgag tgatgccaac aaggcctcgg ccagggcctc acgcgaaggc   | 180  |
| ggcgtgccc cgcgtgcccc cggggcctct ccttccccag gcggggatgc ggcttgagc     | 240  |
| gaggtgggc ctggggccag gcccttggcg cgatccgcgt caccgcccc ggcgaagaac     | 300  |
| ctcaacggag ggcgcggag atcggtagcg cctgctgcc ccaccagtg tgacttctca      | 360  |
| ccaggagatt tggtttgggc caagatggag ggtaaccct ggtggccttg tctggtttac    | 420  |
| aaccacccct ttgatggaac attcatccgc gagaaagga aatcagtcg tgttcattga     | 480  |
| cagttttttg atgacagccc aacaaggggc tgggttagca aaaggctttt aaagccatat   | 540  |
| acaggttcaa aatcaaagga agcccagaag ggaggtcatt ttacagtc aaagcctgaa     | 600  |
| atactgagag caatgcaacg tgcagatgaa gccttaaata aagacaagat taagaggctt   | 660  |
| gaattggcag tttgtgatga gccctcagag ccagaagagg aagaagagat ggaggtaggc   | 720  |
| acaacttacg taacagataa gagtgaagaa gataatgaaa ttgagagtga agaggaagta   | 780  |
| cagcctaaga cacaaggatc taggcgaagt agccgccaaa taaaaaaacg aagggtcata   | 840  |
| tcagattctg agagtacat tggtagctct gatgtggaat ttaagccaga cactaaggag    | 900  |
| gaaggaagca gtgatgaaat aagcagtgga gtgggggata gtgagagtga aggcctgaac   | 960  |
| agccctgtca aagttgctcg aaagcgggaag agaattggtga ctggaaatgc ctctcttaaa | 1020 |
| aggaaaagct ctagggaagga aacgccctca gccaccaaac aagcaactag catttctatca | 1080 |
| gaaaccaaga atactttgag agctttctct gccccctcaa attctgaatc ccaagccac    | 1140 |

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| gttagtggag | gtggtgatga | cagtagtcgc | cctactgttt  | ggtatcatga  | aactttagaa  | 1200 |
| tggcttaagg | aggaaaagag | aagagatgag | cacaggagga  | ggcctgatca  | ccccgatttt  | 1260 |
| gatgcata   | cactctatgt | gctgaggat  | ttcctcaatt  | cttgtaactcc | tgggatgagg  | 1320 |
| aagtggtggc | agattaagtc | tcagaacttt | gatcttgta   | tctgttacaa  | ggtggggaaa  | 1380 |
| ttttatgagc | tgtaccacat | ggatgctott | attggagtca  | gtgaactggg  | gctggttatc  | 1440 |
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| attggtagga accgtttacca gctggaatt cctgagaatt tcaccactcg caatttgcca   | 3060 |
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| atga  | 4264 |